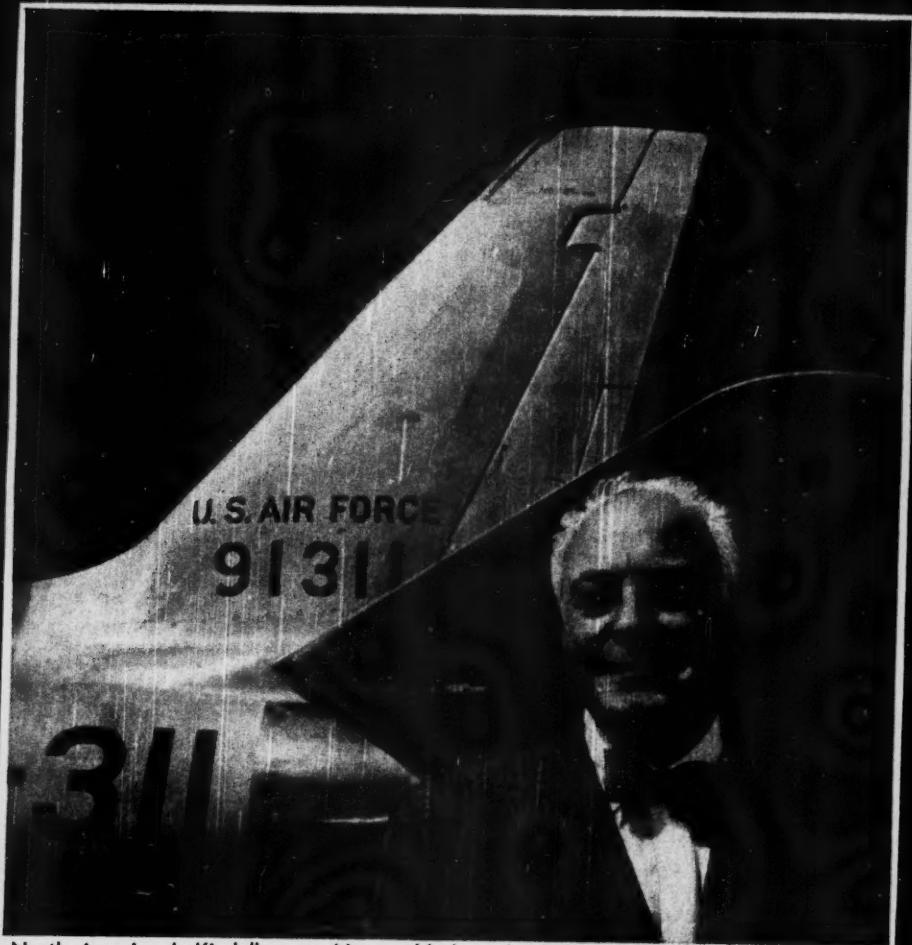


BUSINESS WEEK

Raising Money

THROUGH THE PIPELINES
INVESTMENT BANKERS

INDEX
YEAR
AGO
◀



North American's Kindelberger: He gambled on the fighting men—and won (page 32).

A MCGRAW-HILL PUBLICATION

NOV. 25, 1950



Chemical Progress

News of developments from General Electric's Chemical Department that can be important to your business.

HOW GENERAL ELECTRIC RESEARCH HELPS MAKE BETTER PLASTICS PRODUCTS

The quality of any molded plastics product depends on the materials and the processes used to make it. G-E Chemical Research has contributed new plastics compounds and new manufacturing methods which have resulted in economies, higher quality, and increased production. Being one of the world's largest producers of finished plastics as well as a major supplier of molding compounds, General Electric is an unusually sound source of information and technical advice on plastics for all of industry.



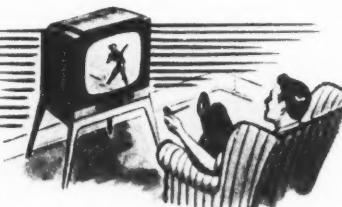
THROUGH A COMPLETE MOLDING SERVICE

By combining the right compound and the right molding process, G.E. is producing big jobs, long-run jobs such as television cabinets and refrigerator parts which were formerly made of other materials. Molded in plastics, these parts have been produced at a lower cost, at a higher rate, and with many new properties which improve on those of previously used materials.



THROUGH BETTER MATERIALS

New compounds, available to all molders, have resulted from G-E Chemical Research—compounds such as the new G-E rubber-phenolics used in this soldering iron handle—which have five times the shock resistance of ordinary phenolics.



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G-E PLASTICS
PROGRESS

✓ Dielectric preheaters, developed by G.E., speed up production of plastics molded parts by bringing pellets to proper pre-molding temperature to cut molding time.

✓ Plastics molders have found General Electric silicone mold release agents are valuable for releasing plastics parts which tend to stick in complex or deep-draw molds.

✓ Fabricators can now supply rubber parts with great strength and resistance to heat, cold, and chemicals. G.E.'s new silicone rubber compounds make this possible.

✓ New G-E silicone glass compounds are now used in applications where conventional heat-resistant materials would either melt or check.

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G-E Chemical Department plants at: Pittsfield, Mass.; Schenectady, N.Y.; Coshocton, Ohio; Decatur, Ill.; Taunton, Mass.; Anaheim, Calif.



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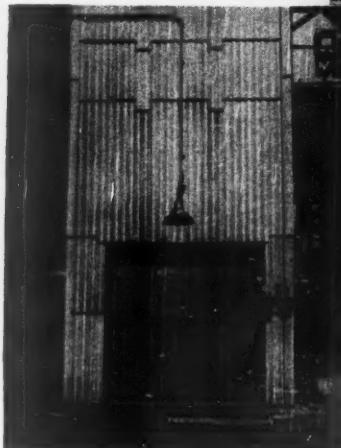
Essential as they are in peace, the skill, courtesy and energy of Bell Telephone people are of even greater value in time of national defense. They are now helping the country's industries and armed forces to get things done.

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BUSINESS WEEK

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BUSINESS WEEK • Nov. 25, 1950

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YOU CAN BE SURE . . . IF IT'S

Westinghouse

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What an Appliance Maker learned from an Automotive Specialist about DIE CASTING...

BUILDING appliances was an old story to a well-known manufacturer but he knew the reputation of the automotive industry for getting quality products at low cost. He figured that any firm with the know-how to serve the car-making industry might be able to show him ways to improve quality and save money doing it. So when rather unusual die casting and plating requirement came up, he got in touch with the Auto-Lite Die Casting Division. The result was an improved casting and a saving in money, too. If you have a die casting requirement in which quality or price is a problem, or if you need the help of Auto-Lite's famous design and engineering experts, write to

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die castings
plastics
wire and cable
industrial
thermometers

Highlights In This Issue

Who Gets What?

- That becomes the crucial question as munitions soak up materials and controls tighten. Where is it all heading? P. 19

Fair-Haired Boy Collapses

- Until a few weeks ago, television was the darling of the boom. Now it's almost flat on its face; everything ganged up at once. P. 25

Competitors Welcome

- Servel is lonely with its gas refrigerator, welcomes Rheem to the field. What Servel is up to. What Rheem is planning. P. 68

Shortage Fades

- Pretty soon, anyway. Benzene supply is still a threat to plastics, but relief is in sight. P. 25

"It Was This Way . . ."

- Truck driver Charlton sweats it out before Philadelphia's labor-management accident board. P. 108

"Where Shall I Put My Money?"

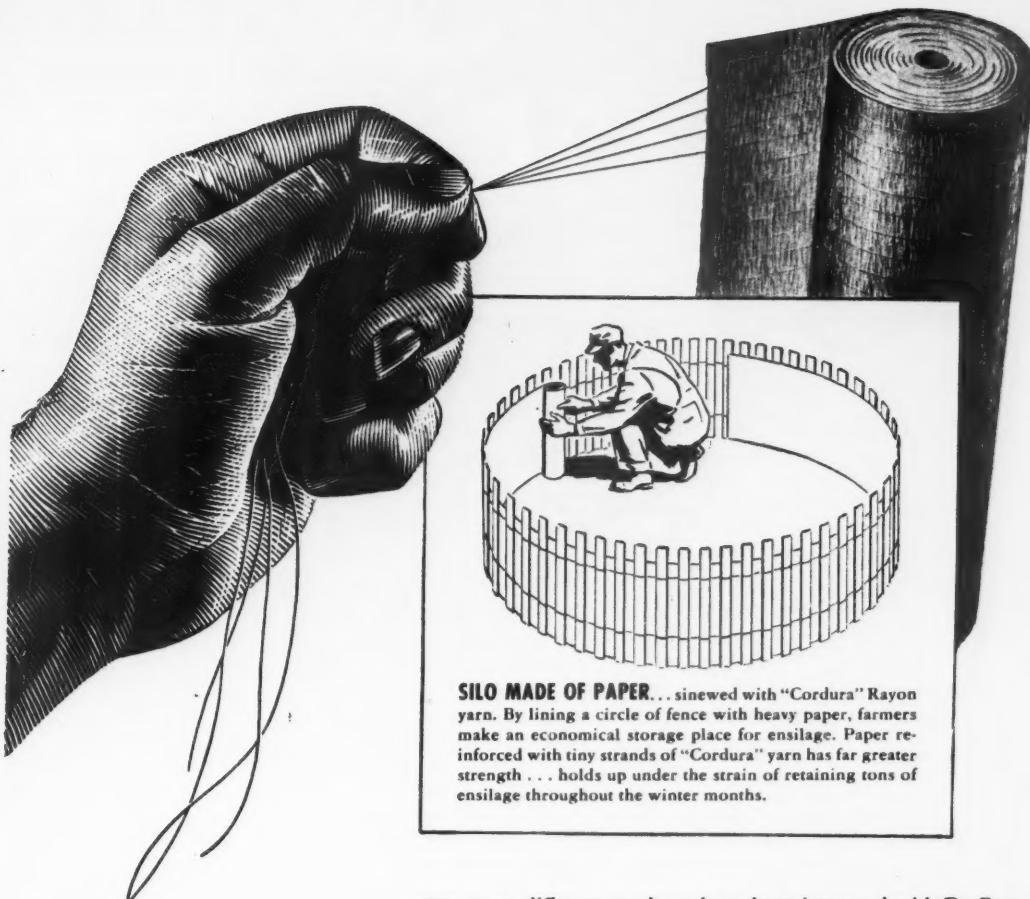
- People keep asking you how they can lick inflation. Here's some savvy advice you can give them. P. 42

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SILO MADE OF PAPER... sinewed with "Cordura" Rayon yarn. By lining a circle of fence with heavy paper, farmers make an economical storage place for ensilage. Paper reinforced with tiny strands of "Cordura" yarn has far greater strength . . . holds up under the strain of retaining tons of ensilage throughout the winter months.

Surprising what you can do with this rayon yarn

SO MANY different products have been improved with Du Pont Cordura* High Tenacity Rayon. This is the yarn that makes conveyer belts thinner . . . yet tougher. It takes the stretch out of V-belts. It makes garden hose so durable that one manufacturer now offers it with a ten-year guarantee. "Cordura" builds in sales advantages . . . and often *decreases costs* at the same time.

This carefully engineered yarn is inherently stronger than natural fibers commonly used. Made of continuous filaments, it has no short ends to pull apart under strain. And "Cordura" is absolutely uniform . . . a yarn with no weak spots.

Consider these advantages, and you may find that this rayon yarn can help you cut costs and add new selling points to your product.

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YOU CAN GET ALL THE FACTS about "Cordura" in this new manual, "Sineas for Industry." It gives physical properties of "Cordura," describes many successful applications . . . and tells you how Du Pont will help you profit from this yarn. Write Rayon Div., E. I. du Pont de Nemours & Co. (Inc.), Wilmington 98, Delaware.



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YOU'LL encounter stainless steel before you even get inside many a restaurant these days—on the marquee, building-front, sign or show window. There's a lot more in the dining-room—on the tables, the serving-stands, and in decorative notes. And back in the kitchens there's a veritable blaze of shining stainless steel . . . utensils, cabinets, work surfaces, ovens, mixers, walk-in refrigerators, washing machines—almost everything you see, everywhere you look.

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cheaply, or gives as lasting service in the long run.

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BUSINESS OUTLOOK

BUSINESS WEEK
NOVEMBER 25, 1950



Two major factors will bolster business in the next few months. These are (1) business spending, and (2) consumer spending.

In general, the size of the economy is determined by those two, plus one more—government spending. But normally, government spending is the smallest of the three (it's certainly the least dynamic); and that will continue to hold true for a while yet.

Government spending—For the next few months, government spending will go along at about the same "normal" rate that's been the pattern for the last few years.

Since Korea, defense spending has been just a little over \$5-billion. That's exactly the same rate as for the like period last year.

It will be well into 1951 before the large volume of government contracts already let turns into a flood of finished war materials.

Next year's cash outlay not only will begin to rise steeply, it also will be spent for a very different type of goods.

The bigger the spending on armament (as distinct from military "house-keeping"), the more government contributes to the prosperity of heavy industry. And booming heavy industry usually means a boom everywhere.

But this has a side effect. Making arms chews up material, uses workers who draw good wages.

Thus income is created—but not goods for which the money can be spent. That's one of the inflationary factors we'll have to fight increasingly.

How completely the government will underwrite the boom—and how grave the danger of inflation—will be decided by Congress.

The lawmakers have to draft the appropriations act for fiscal 1952. They have also to decide whether the budget will balance—how much will be collected in taxes, how much borrowed.

Business Spending—Until military spending picks up speed, the burden of keeping heavy industry humming is squarely up to businessmen.

And business is only too glad to cooperate. Everyone wants to tool up so as to do his arms job, and at the same time keep up civilian supply. This is the one hope of avoiding straitjacket controls.

Already, manufacturers' spending on new plant and equipment has risen almost to the record 1948 level of \$8.1-billion. Next year it will eclipse that by a substantial margin (BW-Nov. 11 '50, p19)—always assuming materials and manpower are to be had.

Business spending makes itself felt in raw materials, as well as in finished plant and equipment.

There's little doubt that factories would gladly add to inventories now and in the year ahead. But manufacturers already are taking in more materials than ever before in peacetime. And still they're falling more and more behind orders.

One reason factories can't accumulate stock is the rate of shipments to customers. These have been the highest ever (August was at an adjusted annual rate of \$22.8-billion, September only a little lower).

Some of this shows up in wholesale and retail inventories.

At the beginning of October, all business inventories were at \$56.2-billion—up a whopping \$1.8-billion in a single month. Put that increase at

BUSINESS OUTLOOK

(Continued)

BUSINESS WEEK
NOVEMBER 25, 1950

an annual rate—about \$20-billion—and you begin to see what a tremendously bigger pipeline is needed to take care of today's boom.

Consumer Spending—Here's the key to consumers' spending, now and for many months to come:

Payrolls are skyrocketing. The Bureau of Labor Statistics says that wage hikes granted this fall are coming faster than ever before—with manufacturing accounting for the lion's share. (Average hourly earnings in factories were up to \$1.48—a new record—even in September, before many of the boosts became effective.)

Industry's wage bill is being swelled, too, by the extra workers now being attracted to jobs.

High employment, high wages, and the lengthening work week add up to a mounting level of personal income. And even though taxes are up, they're not up so much as income.*

The latest Dept. of Commerce estimate of personal income puts it at an annual rate of \$228.3-billion.

That's the third consecutive monthly figure to set a new high. Even at the peak of the insurance payments to veterans last March, personal income was swelled only to \$219.3-billion.

Well-heeled consumers almost automatically mean good retail sales. But, in this case, it is doubly sure that they'll spend, not save.

The Dept. of Commerce figures that consumers, in the third quarter, dragged down their savings at an annual rate of \$10-billion—not counting a rise in their mortgage debt at a \$6-billion rate.

Of course, that was a period of war-scare hoarding. And people were buying to beat rising prices.

But this buying to beat rising prices is getting to be almost a flight from the dollar into things. Saving looks less and less attractive. Going into debt has little of its customary repugnance to the thrifty.

Here's a sample of the public's attitude toward fixed-interest securities: Ever since last May, redemptions of E bonds have been greater than sales. For the last three months, the deficit has exceeded \$100-million a month.

For consumer spending to stay high, there's got to be a lot of shifting.

At the beginning of this year, stores handling durable goods got 33¢ of the spender's dollar. At the height of the July-August buying surge, 37¢ went for hard goods.

How much the outlay on hard goods will shrink depends on availability. For example, there was a time during World War II when sales of durables fell off to 15% of the total. And nondurables rose all the while.

Obviously, though, arms aren't going to gobble up anything like so large a share of total output any time soon as they did in wartime.

One thing alone will tend to hold back consumer spending next year. That's restrictions on consumer credit.

For the first time since the end of the war, it is likely that repayments on instalment loans will top total new credit. Such a shrinkage in next year's instalment credit could be fairly deflationary.

And, after Christmas, repayments always wash down the total charge-account debt. (It fell nearly \$700-million early this year.)



New Improved Gulf Lubricants

offer effective help in your efforts to cut costs!

OUT of the Gulf Research Laboratories have come more new and improved petroleum products to help you gain an edge in the "Battle of costs"!

New Gulfspin, revolutionary spindle oil, helps textile mills reduce maintenance and power costs.

New Gulf Micro Bearing Oil and Gulf Special Instrument Oil provide long-lasting gum-free lubrication for small precision bearings and gears.

New Gulflube Motor Oil X.H.D. reduces sludge deposits and engine wear, extends overhaul periods for light delivery and taxicab fleets.

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These are just a few of the quality Gulf products that can help you improve production and reduce costs. Call in a Gulf Lubrication Engineer today and ask him to recommend the most suitable oils and greases for your equipment and operating conditions. Write, wire, or phone your nearest Gulf office.



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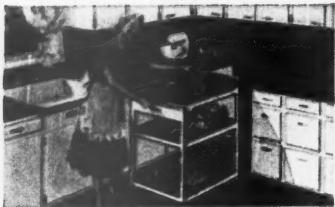
Sales Offices-Warehouses

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Your plans  for tomorrow...

Do they include the 28-way versatility of MASONITE HARDBOARDS?



Kitchen cabinets keep their gleaming enamel finishes... doors won't sag or twist when made with dense, durable and grainless Masonite Hardboards.



Refrigerator cars offer more protection, sanitation, when floors, inside linings and roof exteriors are built of moisture-resistant Masonite Hardboards.



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Infant and juvenile furniture will stand up under more punishment if tough, splinter-free Masonite Hardboards are used.



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Check
all these advantages

1. Hard
2. Dense
3. Smooth
4. Grainless
5. Great structural strength
6. Uniform structure
7. Dimensionally stable
8. Resist moisture
9. Resist weather
10. Resist abrasion
11. Resist many chemicals
12. Won't split
13. Won't crack
14. Won't chip
15. Won't dent
16. Won't splinter
17. Won't absorb odors
18. Equal strength in two directions
19. Easily laminated
20. Won't rust or corrode
21. Can be punched
22. Can be drilled
23. Can be sawed
24. Can be routed
25. Can be bent
26. Can be veneered
27. Can be die-cut
28. Take any applied finish

Today's blueprints can become tomorrow's finished products—more quickly, and at lower cost—when you call on the growing family of Masonite Hardboards. No other materials are quite like them. By the exclusive Masonite process, exploded wood fibers are welded into rigid panels without artificial fillers or binders. Our engineers will be glad to tell you just how Masonite Hardboards can fit in with *your* production plans.

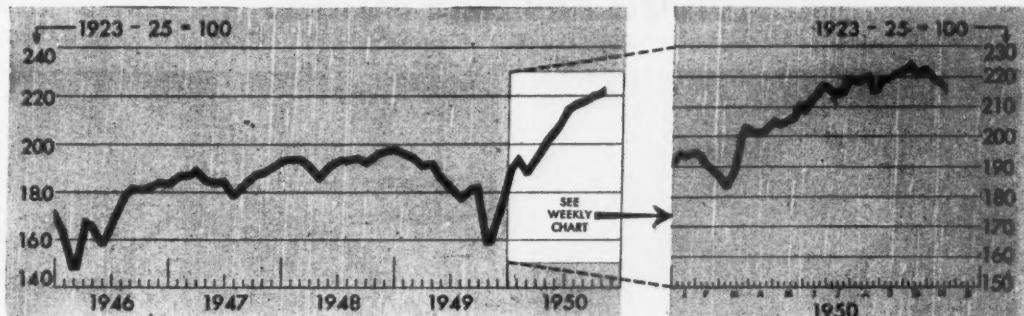
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111 West Washington Street, Chicago 2, Illinois

Masonite Hardboards—39 types and thicknesses for a thousand uses

"Masonite" signifies that Masonite Corporation is the source of the product.

FIGURES OF THE WEEK



Business Week Index (above)

PRODUCTION

	\$ Latest Week	Preceding Week	Month Ago	Year Ago	1947 Average
Steel ingot operations (% of capacity)	102.7	102.7	102.6	78.2	97.3
Production of automobiles and trucks	122,498	†161,009	188,323	115,152	98,236
Engineering const. awards (Eng. News-Rec. 4-week daily av. in thousands)	\$32,683	\$33,117	\$39,605	\$26,783	\$19,433
Electric power output (million kilowatt-hours)	6,728	6,574	6,503	5,644	3,130
Crude oil and condensate (daily average, 1,000 bbls.)	N.A.	5,911	5,902	5,211	3,842
Bituminous coal (daily average, 1,000 tons)	1,833	†1,902	1,917	1,197	1,685

TRADE

	\$ Latest Week	Preceding Week	Month Ago	Year Ago	1947 Average
Miscellaneous and L.C.L. carloadings (daily average, 1,000 cars)	82	84	85	66	86
All other carloadings (daily average, 1,000 cars)	58	60	63	40	52
Money in circulation (millions)	\$27,296	\$27,388	\$27,228	\$27,397	\$9,613
Department store sales (change from same week of preceding year)	+8%	None	+11%	-8%	+17%
Business failures (Dun & Bradstreet, number)	170	135	165	183	228

PRICES (Average for the week)

	\$ Latest Week	Preceding Week	Month Ago	Year Ago	1947 Average
Cost of Living (U. S. Bureau of Labor Statistics, 1935-1939 = 100), Sept.	173.8	173.0	169.6	105.2	
Spot commodities, daily index (Moody's, Dec. 31, 1931 = 100)	485.2	†487.2	466.6	344.0	198.1
Industrial raw materials, daily index (U. S. BLS, Aug., 1939 = 100)	339.1	336.8	317.8	228.6	138.5
Domestic farm products, daily index (U. S. BLS, Aug., 1939 = 100)	359.5	355.5	348.0	289.0	146.6
Finished steel composite (Iron Age, lb.)	3,837¢	3,837¢	3,837¢	3,705¢	2,396¢
Scrap steel composite (Iron Age, ton)	\$40.75	\$40.75	\$40.67	\$29.92	\$19.48
Copper (electrolytic, Connecticut Valley, lb.)	24,500¢	24,500¢	24,500¢	18,500¢	12,022¢
Wheat (No. 2, hard winter, Kansas City, bu.)	\$2.21	\$2.22	\$2.13	\$2.19	\$0.99
Sugar, daily price (raw, delivered New York, lb.)	6.18¢	6.20¢	6.22¢	5.88¢	3.38¢
Cotton, daily price (middling, ten designated markets, lb.)	43.43¢	†42.26¢	39.33¢	29.67¢	13.94¢
Wool tops (Boston, lb.)	\$3.35	\$3.15	\$3.10	\$1.89	\$1.41
Rubber, daily price (ribbed smoked sheets, New York, lb.)	73.50¢	83.70¢	63.25¢	16.85¢	22.16¢

FINANCE

	\$ Latest Week	Preceding Week	Month Ago	Year Ago	1947 Average
90 stocks, price index (Standard & Poor's Corp.)	157.8	†157.9	158.9	128.0	78.0
Medium grade corporate bond yield (Baa issues, Moody's)	3.21%	3.22%	3.22%	3.35%	4.33%
High grade corporate bond yield (Aaa issues, Moody's)	2.67%	†2.67%	2.68%	2.60%	2.77%
Call loans renewal rate, N. Y. Stock Exchange (daily average)	1½-1¾%	1½-1¾%	1½-1¾%	1½-1¾%	1.00%
Prime commercial paper, 4-to-6 months, N. Y. City (prevailing rate)	1½-1¾%	1½-1¾%	1½-1¾%	1½%	1-1½%

BANKING (Millions of dollars)

	Demand deposits adjusted, reporting member banks	N.A.	49,230	49,339	46,625	††27,777
Total loans and investments, reporting member banks	N.A.	69,373	68,841	66,506	††32,309	
Commercial and agricultural loans, reporting member banks	N.A.	16,722	16,147	13,776	††6,963	
Securities loans, reporting member banks	N.A.	2,106	2,063	1,997	††1,038	
U. S. gov't and gov't guaranteed obligations held, reporting member banks	N.A.	33,392	33,580	37,257	††15,999	
Other securities held, reporting member banks	N.A.	6,307	6,439	4,947	††4,303	
Excess reserves, all member banks	1,090	770	1,330	1,086	5,290	
Total federal reserve credit outstanding	20,171	19,853	20,426	18,351	2,265	

*Preliminary, week ended Nov. 18.

††Estimate (BW—Jul. 12 '47, p. 16).

‡Revised.

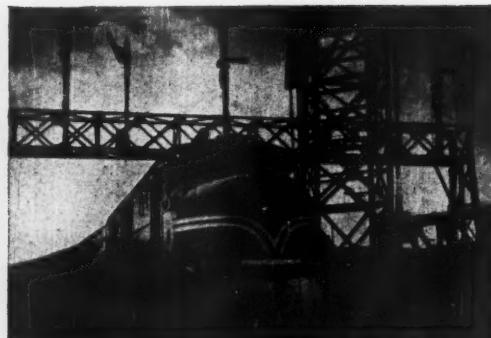
†Date for "Latest Week" on each series on request.

N.A. Not available at press time.

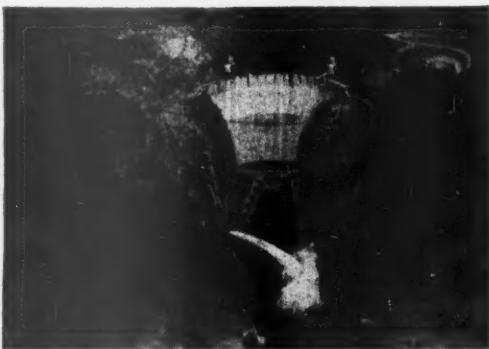
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WASHINGTON OUTLOOK

WASHINGTON
BUREAU
NOV. 25, 1950



A national wage-stabilization policy is being drafted, to be ready whenever price controls start. It will be a sort of "Little Steel Formula."

There'll be no wage freeze. The plan is to let the fifth-round raises run their course. Unions that haven't had post-Korea boosts when they come under controls will be allowed to get them—up to the "stabilization line." This limit will be geared to the fifth-round average (over 10¢ for the big unions). There'll be a provision for later adjustments, mostly on living costs.

The plan isn't firm and faces trouble. To make it work effectively, the stabilizers will have to sell the unions on the idea of (1) not striking for wages above the stabilization level, and (2) giving up automatic raises for productivity and living costs now provided in many contracts. The unions will balk and may knock the whole scheme into a cocked hat—even though the lure is a tight rein on prices.

The short session of Congress won't do much. This needs saying again. With Congress back Monday, there'll be a rash of news on what's proposed. But action will be limited. Statehood for Alaska and Hawaii has only a thin chance, at best. Rent control probably will be extended a few more months, to give Congress time to reconsider next year. More money for defense is sure—perhaps over \$10-billion. A new revenue law is in doubt.

On taxes, corporations can count on Congress' voting a stiff increase when all the wrangling is over. This is the prospect:

The House will O.K. Truman's excess-profits tax—at least something akin to it. The schedule calls for a vote before Dec. 9.

The rub will come in the Senate. Truman's EPT will be toned down and maybe scrapped. A higher regular tax is strongly backed as a substitute. Such a House-Senate split dims the chance of a law before next year.

The extra tax on corporations, when it's voted, will be near \$4-billion, as Truman asked. The fussing is over how to raise it, not over how much. Congress isn't antibusiness. But it doesn't relish higher individual taxes next year, thus wants to get all it can from corporations first.

No easing up on instalment credit is in sight. True, protests are mounting. They'll hit the headlines next week when Congress holds hearings on the complaints of auto and appliance dealers. But the Federal Reserve Board plans to stand pat.

Even tighter curbs are in prospect. The board is considering adding furs, jewelry, carpets, draperies, motorcycles, pianos, sporting goods, even items costing \$10 and sold on time. This may not be done before Christmas, but officials say it will happen next year.

Bank credit: The Federal Reserve Board is prodding the bankers to tighten up. It will ask Congress for more power to hike reserves as a credit brake.

Stock margins: There's no real worry over the bull market's behavior, but the inflation fight may push margins up "for appearance's sake."

Commercial construction loans: The board probably won't control

WASHINGTON OUTLOOK (Continued)

WASHINGTON
BUREAU
NOV. 25, 1950

them. Tighter regulation of materials will be a check on this type of construction.

Watch for a new farm program—a substitute for the old Brannan Plan. Secretary Brannan is in hot water with the Democrats, who think he cost them votes. So he's scrapping his old scheme and starting on a new one for '52.

Do we have to bargain with Red China? She has intervened in Korea. She is using her Manchurian armies as a threat against us—despite assurances that we have no intention of violating her border.

The answer is not pleasant. It reflects our military weakness and shows that, in the East-West struggle, the Reds still call the plays.

This is the background: Our policy as leader of the West is to contain Russia, prevent the spread of communism. The nations following us depend upon us for protection against Russia. When we abandoned China to the Reds, our allies began to question whether we could or would stand up to Russia. Then came Korea. We decided to fight, to show we meant business.

Was Korea intended as a trap for us? Our State Dept. thinks not. The official view is that Russia engineered the invasion of South Korea, our "satellite," by North Korea, her "satellite," to create embarrassment. If we didn't fight, our allies would have less reason to rely on us.

But Korea is turning into a trap. Regardless of what Russia intended, the fact is that she is succeeding in tying down Western strength in Asia—the French in Indo-China, the British in Malaya, the U. S. in Korea. Her own troops aren't committed, thus are free to threaten Europe.

That's why we have to bargain with China. Militarily, it's Russia that we must reckon with. A big war with China would leech our strength, without bleeding Russia. With us tied down, Europe would be so weakened that her will to resist the Reds could crack. This might invite Russia to march. That's the danger—the spot the West is on in Asia.

Can China be bought off by concessions? That depends on what she's up to—protecting legitimate interests or playing Russia's game.

- She will get border guarantees and guarantees of electric power which her Manchurian industries want from Korean installations.
- She wants a hand in Korea, where she fears Western domination. She may even get this, if she keeps her terms reasonable.

The U. S. wants to placate Red China. It's a military necessity now. And, over the years, the hope is to break her away from her close ties to the Kremlin. This means letting her into the U. N. and, in time, recognizing the Reds as the government of China. That may be wishful thinking, but it's policy.

But what if China still threatens, in the face of U. N. concessions? That would leave no doubt that she's playing the Russian game willingly. She can tie up U. N. troops indefinitely in Korea, merely by acting warlike. And if she really makes a drive to throw them out, World War III will be close.

Chances are on the side of a settlement, or so Washington is gambling. Defense plans now are based on the assumption that there's time for a buildup of two to three years.



HOW TO GIVE HAM TOP BILLING

Here's a perfect example of Continental's "let's make-it-better" policy. It's a miniature, pear-shaped ham can that does things no other can for hams has ever done before.

Because of the size (1½ to 2 lbs.) and special shape of this can, the contents can be processed in such a way that they will keep without refrigeration. The body and top—and this is also a new development by Continental—can be beautifully lithographed in true colors. And, finally, the pear shape permits the can to be set either flat or on one end. This makes it possible for storekeepers to arrange attractive counter

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Future Controls—the Pattern Emerges

- For months, government controls on materials will be limited to the slow expansion of cutbacks and allocations.
- By midsummer, the government will have to make the ultimate decisions on guiding a half-war, half-peace economy.
- Very possibly, there will be a revival of the wartime Controlled Materials Plan, regimenting the whole economy.
- But there's a chance that some wholly new system will be evolved to leave civilian producers some freedom.

Mobilization controls for limited war today are about as far along as World War II controls were late in 1941.

A group of control orders is already on the books, and more are coming. Officials, looking ahead, can see outlines of the more efficient system of controls that will have to come eventually. But they can't be too sure yet about the details.

• **Free as Possible**—The problem is to squeeze military and essential civilian needs out of an already drum-tight economy. It is complicated by the desire to leave the civilian part of the economy as free as possible. The trouble is that when you reduce civilian supplies, you intensify the competition for what's left. This in turn intensifies inflationary pressures—and so the need for controls over this sector of the economy.

Then you have to face up to this issue: Do you go ahead and ration materials for the whole economy, civilian and military, just as if it were substantially all military?

• **NPA Prediction**—For the first time, businessmen have been given at least one set of coherent answers to these questions. Top officials of the National Production Authority—the Commerce Dept. agency that exercises the most direct controls over industry—are saying this is the trend to expect:

In the next few weeks, look for more orders restricting the free use of critical materials. Copper users are due for a cutback to perhaps 70% or 75% of their consumption during a recent base period—just as aluminum users were cut back on aluminum to 65% of their use during the first six months of 1950. Civilian use of cobalt has been cut back 70% in November. There are other orders like this in the

works at NPA—on nickel and other alloying metals, particularly.

Once these orders are issued, you can look for a lull. There will be amendments or refinements of orders already issued, but there won't be any big, new cutback programs from NPA.

Beginning along in February, though, look for supplies of critical materials to begin getting tighter. That's when NPA will approve additional allocation programs to assure supplies of steel, copper, and aluminum for specific nonmilitary industrial needs—petroleum refining, for instance, or electric utilities. These allocation programs will be similar to those already in effect for freight cars and Great Lakes ore boats.

Then, along about midsummer, the government will have to face ultimate realities. You can anticipate either something approaching a "Controlled Materials Plan," or some wholly new system.

I. Planners' Dilemma

CMP was the tool devised after much trial and error by the War Production Board to control the vast war production during World War II. WPB took control of the distribution and use of the entire supply of three metals—aluminum, copper, and steel. It not only decided who got them, but when he would get them and what he would do with them after he got them. Almost by definition, a full-blown CMP means complete control of the economy from Washington.

• **Large Order**—This last prediction—"a CMP by July"—is a very large order, indeed, to enforce on a U.S. that's mobilizing for something less than all-out war.

The Defense Production Act gives the Administration plenty of authority to invoke such a program. But the question is: Do present or prospective mobilization plans require such complete regimentation of the economy?

The answer is a pretty flat "yes" from officials already harassed by the flourishing complications of piecemeal controls.

• **Agreement**—Manly Fleischmann, general counsel of NPA, has put this forecast on the record. And in a guarded sort of way, both NPA chief W. H. Harrison, and his boss, Commerce Secretary Charles Sawyer, have let it be known they're inclined to go along with Fleischmann's forecast of what he calls a "Controlled Materials Plan."

Fleischmann, an ex-WPB man himself and a key man at NPA, says publicly he believes such tight controls over copper, aluminum, and steel are certain by summer, "if we have a \$50-billion or \$60-billion military budget." Actually, however, NPA officials believe you have to go most of the way to this control pattern, even though the military budget is "only" \$40-billion—which now seems a more likely figure (BW-Nov. 18'50,p19).

• **Symington Doubts**—This week, reporters who tried to pin down W. Stuart Symington on NPA's tentative timetable for CMP got noncommittal answers—despite the NSRB chief's usual advocacy of "tough controls." Symington said that, while it is easy for Washington officials to do too little, it is also "easy to do too much," and that "too heavy a hand" might hurt the economy.

Symington still talks about the possibility of coping with dislocations and inflation through stiff taxes and credit controls—the methods easiest to administer and enforce.

However, the NPA line, as spelled out by Fleischmann, stresses the inefficiency and inequities that arise out of the present "first-things-first" controls.

Here's the kit of controls NPA officials already are using to speed military procurement and the stockpile:

II. Priorities Come First

Right now, there's just one band of priorities. It gives the military and atomic-energy procurement people enough preference to see that delivery

schedules are met. But NPA officials figure that—as was proved during World War II—as priorities are handed out to more and more people, this “hunting license” becomes worth less and less.

Furthermore, the ability of a contractor to “extend” his priority to suppliers raises two big problems:

- The controllers don’t know how far the wave of extensions may go, or whom it may hit.

- Unpoliced extension is an invitation to abuse.

Nevertheless, you may see secondary priority ratings established. Such a system might be set up to take care of vital maintenance, repair, and operation supplies—the so-called “MRO”—needed by industry to keep itself going.

III. Conservation Orders Now

This is the method NPA now favors for cutting back civilian consumption of critical materials. The aluminum order is a case in point: Users are permitted to consume only 65% of their average monthly consumption of aluminum during the base period, the first half of 1950.

Cutbacks on users of copper and other scarce metals will be made by this kind of formula, unless the signals are suddenly changed. On aluminum, you may be cut back to 50% of your base period in the next month or two, on tin to 50%, on copper to 65%—and to even smaller supplies of things like nickel and other critical metals.

- **Relative Need**—This kind of cutback makes no allowance for those industrial or civilian uses that are obviously more important than other nonmilitary uses.

It takes away 35% of the aluminum that was going into ashtrays and window blinds. But it also cuts back on the aluminum essential, say, to hand tools or machine tools. And we will need more of these, not less.

So the question is raised: Why not cut out window shades and ashtrays entirely and make more aluminum available for more essential uses?

NPA officials know that across-the-board cutbacks immediately raise these demands. They are providing answers indirectly, by giving “spot assistance” or “hardship” supplies to users who make out a case that NPA officials just can’t deny.

IV. Limitation-Order Dangers

Another kind of order cuts back production of specific items by specific amounts. Best example so far: the ban (“100% cutback”) on construction of certain commercial amusement structures—race tracks, dance halls, etc. Sentiment in NPA, generally, has been against broadening the use of this kind of cutback.

Officials don’t want to have to say to the auto makers, “Reduce your output to a rate equivalent to X% of the units produced during 1949.” Instead, NPA figures to get cutbacks on autos and other consumer durables by curtailing their use of metals.

- **Indirect Cut**—Officials feel they can make out a convincing case for flat percentage cutbacks on such things as aluminum and copper: “It’s needed for military hardware and the stockpiles.” They know that these cutbacks in fact mean a reduction in automobile production by amounts roughly equal to the cutbacks—say 30% or 35%. But NPA officials figure they are in a stronger position if they can say to Detroit, “You are free to make just as many cars as you can, as long as you stay within these obviously necessary conservation orders.”

There is a real difference. One method is just saving copper; the other is cutting back on the pride and joy of America, the new car.

These kinds of orders—priorities, conservation, and limitation—are figured to become less important as time goes on. On the other hand, you’ll see a steady expansion of still another kind.

V. Allocation Orders Ahead

The allocation programs providing 310,000 tons of steel per month to freight cars and 10,000 tons per month to ore boats are the prototypes of programs to come. NPA officials figure they will cover a whole gamut of essential civilian industries.

Besides utilities and petroleum, there will be allocation programs for plant expansion in aluminum production, for instance, or for commercial aircraft, or ocean-going ore boats and other shipbuilding programs, or railroad construction and repair, in addition to the freight car program—and, of course, the military procurement program itself.

In fact, NPA officials guess their allocation programs may expand to the point where they may be taking, say, 50% of steel, perhaps more of aluminum and copper. In which case, they figure they will be halfway to a “Controlled Materials Plan.”

- **Bill of Materials**—The military will have translated its needs in tanks, planes, and guns into tons of steel, aluminum, and copper—and these in turn will be translated into specific sizes, shapes, forms, and quality of materials and components needed. Then the whole thing will be spread over a timetable calling for the production of so many of each of the wanted items month by month.

These same vastly detailed breakdowns will be drawn up for a few key things on the civilian side—especially those industrial programs that directly

support the military schedules, such as petroleum and electric power.

Lastly, you bring in the minimum needs for the essential civilian economy, broken down in much the same way.

- **Into Balance**—Then, as was done in WPB days, the NPA officials figure they will add up the demands, whittle down those that are out of line, bring the whole shooting match into balance with available supply, hand out allocations—and then you’d really have things running efficiently.

VI. How Far Do You Go?

If all this is good and necessary—and many aren’t yet ready to say it is either—even NPA knows it is nowhere near equipped to tackle any such project.

For one thing, we don’t need controls on any such scale at this time.

For another, NPA and the other agencies just don’t have the people to handle this huge job. (Fleischmann claims NPA would need more than 5,000; WPB at the peak needed 23,000.)

And lastly, neither the military, industrial, or civilian requirements are known. Hence, CMP or anything like it is completely out of place now.

- **“Free” Metal**—There’s one big difference between the present situation and World War II mobilization:

Then, most aluminum, copper, and steel were going to military programs with a prescribed timetable of deliveries. There was virtually no “free” metal. Now, there may be as much “unscheduled” metal as scheduled.

You can’t let this go to the highest bidder; that really builds inflation. So you slap on price controls—and that means price no longer functions as the mechanism for distributing supplies. So the controllers have to ration out the “free” supply.

VII. Something New Needed

This is a prospect to make strong men shudder. However, you may find NPA officials swinging to something like the wartime “Production Requirements Plan,” which preceded CMP—in effect, a simple rationing out of unallocated supplies of strategic metals to the “free” civilian economy.

Such a “side-by-side” arrangement raises terrific problems. It is something like running a country half controlled and half free.

All of which leads to this not too hopeful conclusion:

Our basically brand-new mobilization situation will probably force adoption of some combination of controls that hasn’t yet been fitted together—a pattern that will become evident only by trial and error, the way CMP itself was hammered out in World War II.

NPA Asks Some Questions

Industry's answers will be basis for new, tougher controls.
Metal fabricators must report their use of aluminum, copper, steel, and magnesium—also their shipments. Tin quiz is already out.

For World War II veterans of the battle of the red tape, this week marked a milestone of sorts in the new mobilization program. The first general questionnaire from the National Production Authority went to industry.

Just about every metal-fabricating shop in the country that has 50 or more employees was due to get a form to be filled out and returned.

• **Basis for Planning**—The questionnaire—NPA Form 1—is what NPA officials are counting on to help them plan tighter controls over materials during the months ahead. The first flurry of easy-to-issue orders is over. They came out fast, because of the pressure of a "first-things-first" policy. And NPA officials admit that a lot of them were issued without accurate information.

Now the controllers figure they have a little time; they can afford to get themselves better information with which to plan and buttress the tougher programs that are coming (page 19).

Form 1 will ask about 8,000 compa-

nies for detailed figures on their use of aluminum, copper, steel, and magnesium; it will also ask for figures on shipments of products.

• **Checklist**—Here are the figures these plants will be asked to report:

(1) Total value of shipments by classes of product during the fourth quarter of 1950, shipments made against rated orders broken down by "DO-numbers," and value of unfilled rated orders as of Dec. 31, 1950.

(2) Estimated value of shipments during the second quarter of 1951.

(3) Inventories, receipts, and consumption of critical materials—aluminum, copper, steel, and magnesium—during the fourth quarter of this year, and estimates for the second quarter of 1951.

• **No Option**—There's nothing voluntary about all this. In fact, the questionnaire flatly states that without exception the report must be filed by Jan. 25, 1951;

The government will handle the

figures on the same confidential basis that it handles information given the Bureau of Census.

• **Producers, Too**—At least half-a-dozen other questionnaires are being worked up by NPA figure wizards. One will be a form for metal producers; they'll have to report each month's output and what industries are getting it.

• **Tin Questions**—One NPA statistical questionnaire has already gone out to some 600 to 800 consumers, importers, or dealers in tin and tin products. NPA Form 7 requires figures on inventories, production, receipts, deliveries of pig tin; NPA Form 8 goes to all importers of tin. Both these reports are virtually the same forms that tin firms have been filing with the Dept. of Commerce ever since 1942 under tin-control laws or under voluntary arrangements with Commerce officials.

Auto Makers Try To Ease Cutback Impact

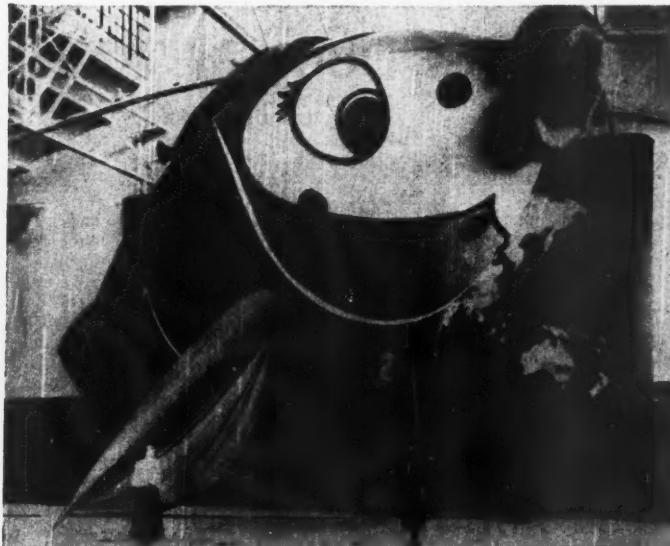
Auto makers asked National Production Authority this week to help them solve next year's production problems. Their aim is to produce about 75% as many cars—even though they may use only 65% as much aluminum (BW—Nov. 18'50,p34).

As things stand now, auto manufacturers say that NPA's cutback order will hold auto output down a full 35% next year. All cars use aluminum in one place where there is no substitute—the hydraulic brake cylinders in each wheel. There's at least one—and in some models, two—of these cylinders in each wheel. And they must be aluminum; no substitute material will do.

Other car parts that are now made of aluminum, however, can be made of a substitute—engine pistons, for example. What car makers hope is that they can get a ruling from NPA that will allow them to switch their piston aluminum consumption to output of hydraulic cylinders. This, they figure, would increase car production by some 10%—perhaps as much as 700,000 cars.

• **Problem**—And that would be O.K. by NPA—if the transaction were all within the company. But it wouldn't be, and that's the hitch. Auto companies don't make parts such as pistons and brake cylinders themselves; they buy them from suppliers. One supplier makes pistons, another makes brake cylinders. And each has been ordered by NPA to cut aluminum use by 35%.

Suppose the piston supplier converts from aluminum to cast-iron pistons. Auto makers want NPA to find some way to transfer the aluminum saved in this way to the brake-cylinder supplier—so he can make more than 65% of his normal output.



You Name It

Don't look for this fish in Pisces Who's Who. It was blown up by Macy's to float in their annual Thanksgiving parade. It's 60 ft. long, looks kind, but lacks a name. Macy's will award a 1951 Ford convertible,

plus a 19-in. TV set, to anyone who can come up with a good name for the mammoth balloon. All you do is get an entry blank from Macy's, send a donation to the Damon Runyon Cancer Fund—with the lucky moniker. Walter Winchell, Jimmy Durante, and Bert Parks are the judges.



IT'S MOVING DAY. Air view shows the first step in the replacement of Cairo (Ill.) railroad bridge. Old span (left) has been dragged out of line onto temporary supports. New span has not yet been dragged into place. Step by step, entire bridge will be replaced.

New Span for Old: It's Done in 20 Hr.



INCHING ALONG. Closeup shows old span being rolled along onto falsework.

Suppose you had a weary old railroad bridge that needed replacing. But you couldn't stop traffic while you replaced it. You couldn't build a new bridge beside the old one: no room. And anyway, the old supports were still good; you wanted to use them again. All you needed was a new superstructure to carry heavier, faster trains.

That's the problem that the Illinois Central R.R. faced with its 61-year-old bridge across the Ohio River at Cairo, Ill. The pictures on these pages show how engineers of the line and U.S. Steel's American Bridge Co. solved it.

The engineers started with one of the 518-ft. main spans. Its 1,100 tons figured to be the toughest of all. On the downstream side, they erected falsework supports. On these, they installed the 1,760-ton replacement span, resting on steel rollers ready to be hauled into place. Tracks and equipment were installed in advance.

Upstream, another falsework was built to provide a new brief home for the old span. Meanwhile, traffic kept rolling.

When everything was ready, a diesel barge anchored upstream hooked cables

onto the ends of the old span and hauled it onto its temporary trestle. Time for the 34-ft. move: just 57 min.

Next, the barge hooked onto the new span, hauled it into line. Halfway, there was a hitch. One end got 18 in. ahead of the other. That took some adjusting. Still, the new span was in place in 75 min.

Immediately, workmen swarmed onto the span, anchoring it, hooking up the tracks. Just 20 hr. after the job started, trains were running again. The engineers had figured on 48 hr.; they better than halved their time.

Dumping the old span into the river came as an anticlimax, but it made a splendid splash. Ties, rails, and part of the flooring were stripped away before the big dunking. Wreckers and divers now are tending to the rest of the scrap-salvage job.

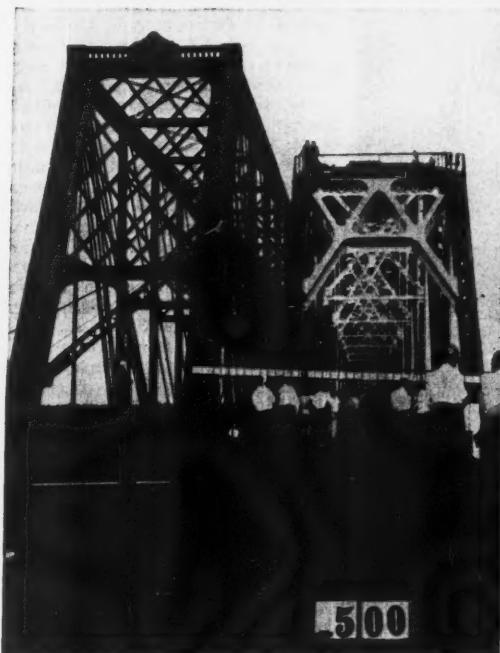
There's still a lot of bridge left to be moved, but the engineers aren't worried now that the big one is safely netted. They'll tackle the other 518-ft. span next. After that, will come four 400-ft. jobs and six of 200 ft. These last will replace three existing 400-ft. spans.



BEFORE Winches stand ready to haul old span away.
New span rests on rollers, ready to move over.



MOVING This photo, taken a scant half hour after the one at left, shows old span already halfway.



MOVED It's 7 hr. later. New span is already in place.
Whole operation stopped rail traffic only 20 hr.



SPLASH Old span plumps into river. Wreckers and
divers will cut it up for scrap.

Russia Trails in Oil Output

Petroleum Institute told that Soviet controls only 8% of world production, but has 25% of reserves. In U.S., energy demand will rise a third in next decade.

Russia and her satellites have 8% of the world's crude-oil production, less than 9% of the refinery capacity, about 25% of the basic reserves.

Over the next decade, the U.S. can expect a 34% rise in energy demand, with oil and natural gas fighting for the lion's share of the new business.

• Petroleum Institute—These were two standout pieces of information supplied to oil-industry leaders at the annual meeting of the American Petroleum Institute in Los Angeles last week.

The first was developed in a paper by Dr. Gustav Egloff of Universal Oil Products Co., Chicago, the second by Chester F. Smith, vice-president of Standard Oil Co., New Jersey.

Dr. Egloff figured present world production of crude oil at about 10.5-million bbl. daily. Of this, the U.S. has 52%; the Middle East, 17%; Venezuela, 14.5%; and Russia and her satellites, 8%; Indonesia, Borneo, and Western Europe make up the rest.

• Resources—Of the ultimate oil resources of the world, 75% are under the control of Western democratic nations, including 25% in the Middle East. The remaining 25% is under Russian domination.

But crude-oil production and reserves are valueless without refining facilities; the location and capacity of refineries are of almost paramount importance in any emergency. Here is the picture on refining: total world capacity, 11.6-million bbl. daily—of which 6.7-million bbl. is in the U.S., 1.5-million bbl. in Latin America, 800,000 bbl. in three large Middle East refineries, and 520,000 bbl. in Western Europe. Total Russian output, including synthetic oils, is probably 1-million bbl. daily. Western Europe refineries are being expanded under ECA sponsorship; in the next two or three years they may add 738,000 bbl. to daily capacity; these would use mostly Middle East oil.

• Energy Pattern—Smith of Esso discussed energy markets of the next decade.

By 1960, he predicted, this nation's energy needs (hydropower, coal, oil, gas) may hit nearly 43-thousand trillion btu. This would mean a compounded gain of 2.7% per year, a higher rate than the 50-year average but less than the 3.9% per year gain in the 1940-1950 decade.

If fuel-price relationships remain about as at present, Smith predicted that energy demand will be divided

among competing sources about as follows:

	1949 (In 1,000 trillions of btu.)	1960
Hydro	1.6	2.3
Gas	5.8	9.8
Coal	12.2	13.6
Oil	12.4	17.2
Total	32.0	42.9

Smith forecast considerable change in the pattern of energy demand. Increased efficiency of the diesel-electric locomotive over steam locomotives may reduce transportation and specialty uses of energy from one-third of the total market to one-fourth by 1960. But use of energy in heating and power generation should rise even faster than it has in the past. Power generation by utilities is a big factor; energy input for power has been rising at a rate of 5% a year since 1937, is expected to maintain this pace through 1960.

• Oil Demand—Taking a closer look at oil, Smith forecast a domestic demand of over 8-million bbl. per day in

1960, against 5.8-million bbl. in 1949.

Fuel requirements for highway vehicles may increase about 2.5% a year, with the number of vehicles on the road going from 40-million to 50-million. Compression ratios probably will go up to a maximum of 12 to 1, and engine efficiency will improve 35%, but at least part of the gain will go to better performance rather than better mileage.

These changes are expected to boost refineries' output of distillate oils (for home heating and diesel engines) from the present 23% of total yield to perhaps 30%. Most of this gain will come at the expense of residual oil—the heavy heating oils of industry. To meet industry's needs for this product, we must look to imports, Smith said.

Republic Expands Steel Capacity

Provisions that Congress wrote into the Defense Production Act to encourage expansion of steel capacity are already bringing results. Last week Republic Steel Corp. broke the news of a \$75-million expansion program that will add 672,000 net tons of steel ingot capacity per year to the company's Cleveland plant.

• Fast Write-Off—Republic says that the accelerated amortization feature of the Defense Production Act made this expansion program possible. Under the new law, industry is permitted five-year write-offs for tax purposes on plant built to produce defense materials.

But from the scope and advanced stage of development of Republic's program, it seems clear that plans were under way well before accelerated amortization became law. Detailed engineering work is already complete, and private financing for the program has been arranged. The major facilities included in the program are:

- A byproduct coke plant consisting of 126 coke ovens, with facilities for coal chemical products;
- A 1,400-ton blast furnace;
- Four open-hearth furnaces;
- New soaking pits;
- Improvements to the present 32-in. blooming mill;
- A new 72-in. tandem cold-reducing mill.

• Contracts—Republic has already let contracts for much of the construction work. Koppers Co., Inc., of Pittsburgh and its subsidiary, Freyn Engineering Co. of Chicago, have taken on a \$30-million order. Koppers has the contract to build the 126 coke ovens in the byproduct coke plant. And Freyn will erect all steelmaking facilities.

Work on the project starts at once. Republic expects the new mill's first steel to be poured early in 1952.



Fills New Post

New man in a new post at Commerce Dept. is Clarence H. Osthagen. Osthagen will act as Administrative Assistant Secretary—a management job at an assistant-secretary level. He ranks just a whisker below Assistant Secretaries Blaisdell and Davis. The new secretary's duties will cover things like personnel, budget, accounting. The Hoover Committee said the job needed doing. Osthagen has been handling personnel for the Air Force.



DESPERATION causes television industry to run incendiary ad as . . .

TV Has Triple Trouble

Industry locked in battle as result of FCC color decision. Taxes, credit controls help drive sales to serious low. Meantime, parts shortages seem certain.

The television industry last week found itself in the midst of a battle that had all the violence of an old-time range war in the West. The lush grass at stake was the U.S. public, a potential market for some 40-million TV sets. On one side of the range stood Columbia Broadcasting System and the Federal Communications Commission, both of whom want the CBS color system adopted. On the other stood the set makers, led by Radio Corp. of America.

• **Who Wins?**—For a while, it looked as if CBS color had won hands down and would get the vast market without a fight. FCC had approved, without qualification, the CBS color system as being the best (BW-Oct. 14 '50, p25). This was a big setback for RCA. It thought its own system had two big advantages over CBS: (1) It was all electronic, while CBS had a mechanical color wheel; and (2) present set owners could get RCA color signals in black and white without the expensive circuit changes needed to get CBS signals in black and white.

Scarcely had FCC decided in favor of CBS when RCA filed suit against the commission. It wanted an injunction to keep the decision from being carried out. Nobody expected much to come out of the court action; once a government agency with FCC's great power makes a decision, it usually stays made.

• **Delay**—That still may be the case. But last week, a three-man federal court

in Chicago gave a small break to the RCA forces. After hearing the arguments, it granted a temporary restraining order that blocked CBS from starting commercial color telecasts on Nov. 20, as planned.

The set makers immediately applauded this action as a major victory. They played up the implication that the court had a question in its mind about the FCC decision. Actually, the order was given only to give the court time to study all the testimony. Since the record of the FCC color hearings alone runs to 10,000 pages, few authorities in the field expect a final decision in less than a month.

Said one of the judges: "No one can expect this court to render any kind of decision today, tomorrow, or next week. It is unthinkable that the court give a decision at once in view of the importance and complication of this issue. . . We've got a lot of studying to do, a lot of reading to do."

• **On Borrowed Time**—Nevertheless, the delay was a victory of sorts for RCA—it gives it time to demonstrate its improved electronic color system, which it plans to do on Dec. 5. It hopes the demonstration will be good enough to make FCC change its mind, at least to some degree.

Meanwhile, CBS was in the process of conducting public demonstrations of its color in New York. It decided to take its case to the public when the set

manufacturers reacted so violently against making color sets. CBS plans to stump the country with these demonstrations, showing the system off in several cities to get the man in the street on its side.

• **Sales Slump**—Regardless of the final outcome of the color fight, the TV industry has a much more immediate problem on its hands—a tremendous slump in sales. At the Chicago court hearings, manufacturers reported that within the past month set sales have plummeted as much as 75%. One company, Sightmaster, Inc., has been forced out of business altogether.

The manufacturers tend to put the full blame for this on the color fight—especially on CBS statements urging the public not to buy sets until they could get those designed to receive the color signal.

There's no doubt that the confusion created by the decision and its accompanying propaganda on both sides was a factor in the sales slowdown. There were two other factors, however: the government curbs on credit, and the new excise tax.

• **Big Drive**—These three put the TV-set industry in a desperate situation. To get out of it, the industry began a huge advertising campaign that, in effect, told potential buyers that their sets would not become obsolete if they bought now.

• **Trouble**—The campaign is sponsored by an industry group called American Television Dealers & Manufacturers. Last week the ad, too, was in trouble. It said that children whose families didn't own TV sets would feel "humiliated" and "left out." There was an immediate and unfavorable reaction from the public, educators, the press. Tide magazine, advertising trade journal, calls the ad a "body blow (to advertising), the roughest it has had in a long, long time."

When it saw the reaction, Ruthrauff & Ryan, the agency that had placed the ad, backed down. Said S. J. Schwinn, chairman of the executive committee: "There is no question but what the . . . advertisement was 'out of bounds' as far as taste was concerned."

• **Safau**—All this adds up to just one thing: The television situation right now is in one vast snafu.

No matter how the Chicago court decides, the case is sure to be appealed to the U.S. Supreme Court. That could, conceivably, tie things up for another six months. But meantime, a more serious bottleneck is looming—the growing shortage of parts. Government restrictions on copper, aluminum, and cobalt are sure to hold up production of all kinds of TV sets. That means that the battle over color may turn out to be a pathetic tempest in a teapot, for the time being.

Movies: New Sick Industry

Box-office slump this fall has exhibitors wondering: Is industry in long-term decline? Not too optimistically, they're pinning hopes on theater TV to pull them out.

To movie-house owners this week, it just didn't figure. There were more people in the U.S. than ever before; they were making more money than ever before—and yet the box office was sick again.

• **Why?**—Television, the obvious whipping boy, could take only part of the blame. Early surveys had undoubtedly exaggerated its effect on movie attendance. Looking around the country, it was clear that another, less tangible factor was at work.

In TV-mad New York, for instance, attendance is off. But in Honolulu, where there is no television, the slump is about as bad. The same is true in comparing other TV and non-TV cities.

Theater men have stopped whistling in the dark and are plainly frightened. For the first time since the war, they have begun to wonder: Have people really gone sour on the movies? Has the industry run into a long-term decline?

• **Cause for Concern**—The facts might make you think so. Since the winter peak of 1946-47, box-office returns have dropped steadily. Each year has been generally worse than the one before.

This year the spring season, which is normally good, was very bad. Exhibitors looked forward to the traditionally dull summer with little hope of reeling their pockets.

But then, Korea broke—and for some unexplained reason unleashed a rush to the box office. Summer business was way above what had been expected.

But it didn't last. By Sept. 15, attendance had started to slide again. Ever since, business has been well below last year—even though the quality of films has generally been above average.

• **Looking for Answers**—For the last few weeks, theater men have been wracking their brains to find what to do about it. The annual sessions of the Theater Owners of America in Houston earlier this month were grim, purposeful affairs. Last week 30 of the top-ranking theater owners in the U.S. followed up with another meeting at New York's Hotel Astor.

Little that was concrete came out of either session. But the New York huddle, which went on behind locked doors, gave the best clue to the tack exhibitors will take in trying to recoup their audience.

• **Large-Screen TV**—Most of the talk at the meeting was about television—

large-screen theater television. Previously, the Houston meeting had approved a resolution urging exhibitors to investigate TV opportunities—both large screen and broadcasting—and to "participate in the development of television, wherever possible."

The New York meeting backed this up, and more. It as much as told the wealthy theater men that it was their duty to go into large-screen sets as an experiment that might save the business.

As things stand now, only 16 theaters have spent the \$25,000 or so needed to install large-screen equipment. This is far short of what exhibitors say will be needed before any regular programming can take place.

Just what this programming will be, no one is sure. Some theater men see movie-house TV as merely an adjunct to newsreels, a way to show Presidential speeches, Army-Navy games, etc. Others envision carrying big, special live shows—something like South Pacific—that

would be exclusive and financed by the theaters.

From the record, though, there's little encouragement in big-screen TV as a box-office draw so far. Chicago, for instance, hasn't been standing in line for the special events that Balaban & Katz has been showing on its circuit.

• **Panaceas**—In a slump, of course, any businessman picks on a pet project as the thing that will pull him out of the trough. The exhibitors have their own list:

- More pictures. With extra films, theater men think the box office might revive. A more frequent change of bill might bring in more of the regular movie-goers.

However, there seems little chance of Hollywood's taking the cue. And exhibitors don't want a movie-making job themselves. They had the chance, but failed to put up capital for a company that would have financed independent producers.

- More color. The Houston convention went on record as insisting "that in forthcoming years all products be produced in color . . ."

- More popcorn. One speaker at Houston quipped that he wasn't sure whether he was at a food or film convention. However, exhibitors don't know if it's a good idea to talk up concession profits. One theater man said it was inviting higher rents and taxes. Another, though, claimed that puffing his popcorn sales got him better terms from film distributors. "They're scared now that I have another business to fall back on."

- **Bright Spot**—Possibly the only bright spot for exhibitors this fall is the government's ban on theater construction. Owners see it pushing up the value of present properties by at least 25%. They also see an end to added competition from drive-ins—which have made up the biggest chunk of theater building in the last few years.



Mighty Bright Mite

The midget mercury-vapor lamp in girl's left hand is supposed to make televised movies look sharper on home sets. Built by Westinghouse Electric Corp., the lamp is described as giving off a light one-eighth as bright as the sun. It replaces the usual lamp in a movie projector to produce a clear black-and-white picture for TV-sending tubes to pick up. Westinghouse also claims that the lamp can be used to advantage in airport searchlights. It will bounce light beams off clouds even as far as 2½ mi. up for cloud-ceiling measurements.

RKO Splits in Two

Radio-Keith-Orpheum Corp. presided at its own dissolution this week as a theater operator and picture-maker-distributor. These two sides of its operations have been split into two new Delaware corporations: RKO Pictures Corp. and RKO Theatres Corp. The split-up, which had to be accomplished by Dec. 31, is in line with RKO's consent agreement during the government's antitrust prosecution of the five major film companies (BW-Nov. 13 '48, p80).

The new RKO companies will take over from the present corporation its picture-producing and distributing assets and theater-operating assets on Jan. 1, 1951. Stock in the new companies will be distributed in exchange for outstanding stock in RKO Corp.

The Comptometer with Floating Touch



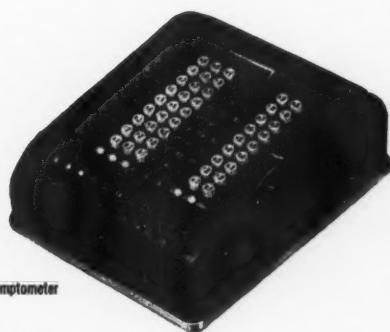
... light, fast
effortless touch
that delights operators!

and Three-way Error Control

... absolutely eliminates
operating errors caused
by imperfect stroke!



Operators *(See)*... *(Hear)*... and *(Feel)*... faulty strokes



New Electric Comptometer



New Non-electric Comptometer

Your nearest Comptometer representative would like to prove to you that these new Comptometer Adding-Calculating Machines can handle your figure work with maximum speed . . . accuracy . . . AND economy!

Comptometer

REG. U. S. PAT. OFF.

ADDING-CALCULATING MACHINES

Made only by Felt & Tarrant Manufacturing Co., Chicago, Ill., and sold exclusively by its Comptometer Division, 1733 North Paulina Street, Chicago 22, Ill.

BUSINESS BRIEFS



"It's too hot for Santa!"

SOME materials can't stand heat. They get soft. Pick up moisture. Spoil. That's true in candy; it's true in pharmaceuticals. And it's one reason people buy air conditioning.

Some machines are affected by heat, too. Metal expands and contracts with temperature changes. When that happens, precise machinery gets out of adjustment. That's true in metal-working; it's true in textiles. And it's another reason people buy air conditioning.

Do men mind the heat? You know they do. You've seen production curves go down as temperatures went up. You've seen tempers flare . . . mistakes and accidents multiply. And that's a third reason to buy air conditioning.

Materials . . . machines . . . men . . . which is your problem? Carrier engineers and Carrier equipment can supply the answer. Carrier pioneered in air conditioning. And Carrier has contributed many significant advances since. Maybe that's the reason our clients believe that Carrier is their best investment. A Carrier representative is listed in the Classified Telephone Directory. Why not call him, Carrier Corporation, Syracuse, New York.

Carrier

AIR CONDITIONING • REFRIGERATION

Auto prices: ICC's order to cut rail rates 12% on autos will probably mean a saving of \$10 to \$30 a car for buyers. The new rates go into effect Feb. 20. . . . Pontiac gave the first sign of a price hike by the Big Three companies. An executive said the tag on the 1951 Pontiac line would probably be "somewhat higher."

Cotton futures climbed to their highest mark since the Civil War. Strong demand and tight supplies pushed the price for December deliveries up to 44.03¢ a lb.

A new U.S. nylon producer may come out of talks between du Pont and Chemstrand Corp.; they are negotiating a licensing agreement. If the deal goes through, Chemstrand, an American Viscose-Monsanto subsidiary, will be the first company other than du Pont to make and sell nylon here.

The zinc shortage forced Inland Steel to cut back output of galvanized sheets. Meanwhile, NPA said it would soon issue new orders putting a ceiling on the amount of zinc a manufacturer can use in making civilian goods.

Alcoa's idle aluminum lines at Massena, N. Y., and Badin, N. C., will go back into production in February. Under a contract with the government, all the output—about 55,000 tons next year—will go to stockpile.

A group of TV stations took the first step toward getting into movie production. Meeting in Chicago, 10 stations tentatively agreed on a \$1-million corporation to make hour-long and shorter films. Small Hollywood companies would probably do the actual shooting.

A little railroad won a round against a big one. An ICC examiner recommended that the Union Pacific be required to set a joint through-rate on shipments moving over its lines and those of the Denver & Rio Grande Western. The Denver & Rio Grande contends UP's refusal to quote a joint rate has frozen it out of the Pacific Northwest (BW—Sep. 10 '49, p30).

The job market in Maryland is so much better that the state's Dept. of Employment Security is firing 85 people (10% of its personnel) on Dec. 1.

Left for the sweeper: Shaeffer Pen Co. got an offer of \$20,000 for the right to rip up some old factory flooring. There's gold in the boards and crevices—the result of 30 years of shaping pen points.

Three ways to fight TUBERCULOSIS

The mortality rate for tuberculosis has declined steadily over the years. According to the National Office of Vital Statistics, the death rate in 1900 was 194 per 100,000 population. Today, it is less than 28—the lowest on record.

Despite the decline in the death rate, tuberculosis has by no means been conquered. Nearly 40,000 people in the United

States lost their lives last year from this disease, and over 130,000 new cases were reported.

Doctors urge continued efforts to advance the fight against tuberculosis. They suggest three ways to do this—*detect the disease early, treat it promptly, and prevent new cases.*



1

Detect the disease early

The surest way to find tuberculosis *early* is through an X-ray examination at the doctor's office or at a chest clinic. It is especially important to take this step if a persistent cough, fever, a "tired feeling" or loss of weight occur—for these may indicate early tuberculosis.

The disease may, however, be a "silent sickness" and show no signs at the beginning. That is why it is wise to have X-ray pictures made during an annual health examination, or whenever a chest X-ray program is sponsored in the community.



2

Treat it promptly

If tuberculosis should be detected in an active stage, prompt and thorough treatment is essential—preferably in a tuberculosis hospital. This usually calls for complete bed rest which helps the body heal the infection.

Other measures may be used including surgery and drug therapy. New drugs, used as an adjunct to rest or surgery, have been especially beneficial in certain types of tuberculosis. There is hope that more effective ones may become available in the future.

Under proper hospital treatment, authorities say practically all persons with early tuberculosis have an excellent chance to get well.



3

Prevent new cases

To help prevent new cases of tuberculosis, specialists urge that those who have the disease remain in the hospital until their condition is under control.

In this way, families, friends, and associates are saved from the danger of infection, for tuberculosis is a "catching" disease spread through contact.

The likelihood of developing it may also be reduced if everyone guards against the disease by getting plenty of sleep, rest, proper exercise, and nourishing food.

Regular health examinations, including a chest X-ray, can usually detect tuberculosis before symptoms become apparent—and often before it becomes contagious.

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Metropolitan Life Insurance Company

(A MUTUAL COMPANY)

1 MADISON AVENUE, NEW YORK 10, N. Y.



TO EMPLOYERS: Your employees will benefit from understanding these important facts about tuberculosis. Metropolitan will gladly send you enlarged copies of this advertisement—suitable for use on your bulletin boards.

**"Let's get out
where the
THINKING
IS
SANER"**

"Our freight bill may be a little greater, but it's worth far more to us in the long run to know we can count on a low-cost, trouble-free operation in the foreseeable future."

That's the gist of conversations going on nowadays in many over-crowded industrial centers.

It remains to decide just where this industrial "Shangri-la" is.

We sincerely believe that here in NEBRASKA we more nearly approach such a situation than any other place which would be considered at all, industrially speaking.

As a matter of fact, that conversation quoted above should have brought out the point that in most cases lower manufacturing costs in NEBRASKA more than offset higher freight rates occasioned by longer hauls to eastern population centers.

Figure it out for yourself—

- LOW TAXES
- LOW UTILITY (ELECTRIC & NATURAL GAS) RATES
- SPLENDID TRANSPORTATION
- UNLIMITED PURE WATER
- NO STATE DEBT
- NO STATE INCOME TAX
- THE INTANGIBLE "SOMETHING" BEST DESCRIBED AS A FRIENDLY ATMOSPHERE, WHICH RESULTS FROM AN ATTITUDE OF UNDERSTANDING AND COOPERATION ON THE PART OF BOTH OUR STATE GOVERNMENT AND THE WORK-WILLING MEN AND WOMEN WHO CAN BE DEPENDED UPON TO GIVE THEIR EMPLOYER A FULL DAY'S WORK FOR A DAY'S PAY.

We have a fine, healthful manufacturing "climate" in NEBRASKA and we're going to do everything within our power to preserve it. Our attitude in this respect is the best guarantee an industry could have as to the future here.

Write this Division of State Government for informative folder as well as specific information—

Dept. BW-23

**NEBRASKA RESOURCES DIVISION
STATE CAPITOL LINCOLN**

AVIATION



The Planes We Are Buying This Year					
COMPANY	Bombers	Transports	Fighters	Helicopters	Trainer
Boeing	400	310			
Douglas	370	240	250		
Lockheed	200	20	900		
No. American	10		600		
Republic			1,200		
Grumman	100		1,050		
Convair	60				20
Others	50	220	1,140	470	
Totals	1,190	690	3,140	470	350

Plane Builders Set for Big Job

Military program calls for triple pre-Korea output, outlays of \$7.7-billion. But so far, orders for 7,840 planes haven't fazed the manufacturers. Boeing is at top of the list in contract dollars.

The services have now cut their \$7.7-billion aircraft-order pie, and industry knows more or less what's ahead.

Right now it looks as though the emergency aircraft program won't require any major overhauling for the airplane builders. The new production called for will be about three times the pre-Korean level. But stepping up from one work shift to three-plus generous subcontracting—can take care of most of the current requirements. And the small manufacturers that are benefiting from the subcontracting run into the thousands.

Eventually, more plants and considerable new tooling may be in order. But up to now, the scarcity of skilled workers and increasing shortages of materials have been the big drawbacks. Recruiting drives are common now in most of the centers where airplanes are made. And materials problems are already reviving that World War II job—the company expeditor.

• Money, Planes—Of the total amount that Congress has actually allocated to aircraft procurement for fiscal 1951, Navy is to get \$2.3-billion, the Air Force \$4.2-billion. About \$1-billion is sup-

posed to go to foreign aid; but the foreign-aid program isn't in solid shape yet.

In all, military orders are going out for 7,840 airplanes. Air Force gets 4,455 in the buildup toward 69 air groups. Navy orders account for the other 3,357.

• On Order—Here's a breakdown to show where the military orders are going—and for what.

Boeing Airplane Co.—The large number of big, heavy airplanes that Boeing has contracted to build for the Air Force undoubtedly makes this company the biggest military plane contractor—in point of dollars—in the U.S. The Boeing backlog, largest in the airplane-manufacturing field, is near \$1-billion.

Orders include over 200 C-97 cargo transports and jet-bomber contracts adding up to around 400 planes. Boeing is also a hot competitor with Consolidated Vultee for a pending heavy-bomber contract. This company's net earnings for the first nine months of 1950 amounted to \$8.2-million.

Douglas Aircraft Co.—Probably the second-ranking contractor is Douglas, with huge orders both from the Air Force and Navy. Douglas quotes a backlog of \$625-million. A big item on

its books is nearly 150 big C-124 cargo transports. The Navy has big orders in for night fighters and attack bombers. A further substantial order is scheduled for a new turboprop attack fighter. Douglas had net earnings of \$4.7-million for the first nine months of 1950.

Lockheed Aircraft Corp.—Lockheed is running close to Douglas for second place in current orders, though no backlog figure is available. On the Air Force side, Lockheed has contracts for approximately 900 jet fighter planes. Lockheed has sold about 20 of its oversize Constellations to the Air Force and Navy for transport work. Its biggest Navy order is for 200 Neptune P2V patrol bombers. The latest Lockheed earnings statement shows a net earning of \$4.6-million for the first six months of 1950.

North American Aviation—Always a specialist on military types (page 32), North American makes the fastest production jet fighter in the U.S., the swept-wing F-86. North American has more than 600 orders for this plane in the 1951 list. It also has well over 300 trainer planes on order.

Republic Aviation Corp.—Orders for two types of its basic F-84 jet fighter total 1,200. Some of these may be earmarked for foreign aid. Republic reported net earnings of \$1-million-plus for the first nine months of 1950.

Gruuman Aircraft Engineering Corp.—The biggest Navy contractor on a numbers basis, Grumman has orders for approximately 1,000 of its F9F jet fighters, besides some smaller orders.

Consolidated Vultee Aircraft Corp.—It has a big new B-36 bomber contract. Convair is working on a new high-speed turbine-propeller-powered version to compete with the Boeing XB-52. Trainer planes make up most of the rest of Convair's list.

McDonnell Aircraft Corp.—No. 2 Navy fighter producer, McDonnell has 700 orders for its Banshee F2H fighter.

Fairchild Airplane & Engine Corp.—New orders for Fairchild's C-119 combat transport more than triple last year's production volume for this plane.

Northrop Aircraft, Inc.—Some 300 Scorpion F-89 night fighters are on order here.

Glenn L. Martin Co.—Martin has two Navy orders for about 50 patrol bombers, with composite jet and piston engine powerplants.

Chance Vought Aircraft—A small additional order for the F7U Cutlass jet fighter keeps this radical but promising craft in production for the Navy.

Helicopters—Sikorsky Aircraft, Piasecki Helicopter Corp., and Bell Aircraft Corp. divide the lion's share of 'copter contracts, with a total of over 300 on order.

Blimps—Goodyear Aircraft Corp. got a small Navy order.

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FLYING HIGH: Korea touched off flood of orders for North American jets. F-86 fighter is near camera, B-45 bomber in distance.

War Plane Solo Pays for North American

With one exception, company has stuck to military planes since World War II. Now defense work booms its business.

A postwar decision to stick strictly to its knitting is paying off handsomely for North American Aviation, Inc.

During the last war, North American built 14% of all military planes bought by the U.S. government. In 1944, the year of peak plane production, the company ranked third (behind Douglas and Consolidated-Vultee) in value of planes produced.

But even then, it was clear that military orders would fall way off once the shooting stopped. When that happened, North American could pick from three courses: It could branch out into nonaviation products; it could go into commercial and private planes; or it could stick to its military diet.

• **No Pots & Pans**—Part of the decision was easy. Even before the production lines slowed down, J. H. Kindelberger (cover), then president, now board chairman, got his staff together over



JOB LINES mob sidewalks. Company has hired 2,000 in Los Angeles since June.

a mail-order catalog. In it, the men marked all the items the company conceivably could make—kitchenware, garbage cans, incinerators, etc. Then the engineering and production staffs figured out what it would cost to build each product. In each case, the cost was above the catalog price.

That settled that: North American would go on making planes. And with

one unhappy exception, its policy has been to make only military planes ever since.

• **Fruits**—This week you could see how well the policy is paying off. North American is taking over the huge Naval Industrial Reserve plant at Columbus, Ohio, the factory used by Curtiss-Wright since its completion in 1941.

The new plant marks the third step

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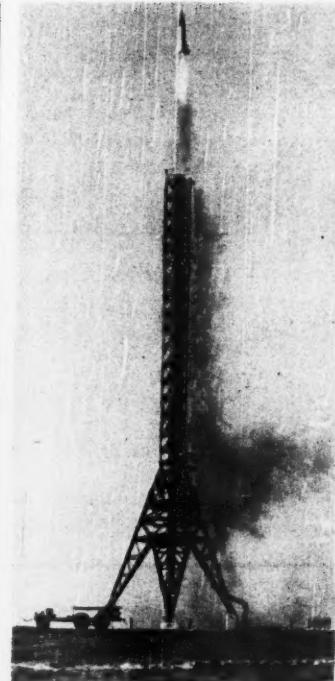
Alfred D. McKelvy Company sent us that "toughie." Our solution was an ingenious pick-a-back carton. Plenty of "extra-ply" protection for jug and tube . . . plenty of "extra-buy" appeal for counters and shelves. (Now, incidentally, all Seaforth single items are packed in eye-reaching Gardner cartons.)

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MISSILES have been part of postwar research. This is the NATIV being fired.

in a series of expansion moves that got under way soon after Korea. In July, North American bought the Torrance (Calif.) plant of Doak Aircraft Co., giving it a total of four factories in the Los Angeles area. And just a month ago, it announced a \$1-million building program that will add a quarter of a million square feet of floor space to its main Los Angeles plant.

Along with the expansion, North American began a major reshuffling of production in Southern California. The main aim was to streamline operations and leave Los Angeles free to concentrate on final assembly of its F-86 fighters, plus engineering and research work.

Kindelberger won't say what the company will make at its new Columbus plant. But since the factory is leased from the Navy, it's a fair guess that North American will turn out a Navy plane there. It might be the AJ-1, a carrier-based attack bomber, powered by two piston engines and one jet engine. North American is now turning out the ship at Downey, Calif. But talk in the industry is that it's more likely to be McDonnell Aircraft Corp.'s Banshee jet fighter.

• **Backlog Up**—In the meantime, North American's backlog of military orders for its own planes has been shooting



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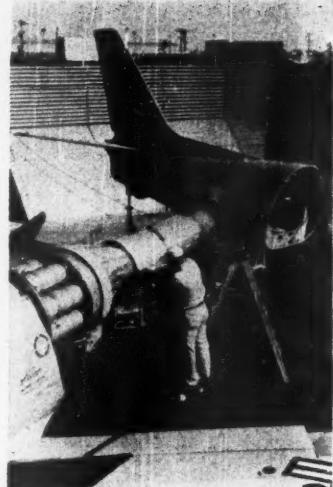
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PLANES IN PARTS: Tail of E-86 slides off so workmen can get at engine.

up—from \$228-million on Sept. 30, 1949, to \$264-million just before Korea, to an estimated \$410-million today. Sales hit \$124-million last year and are probably even higher this year. (The peak was \$684-million in 1944, the low \$20-million in 1947.)

Profits, too, have followed the pattern. During the war years, they ranged between \$6-million and \$8-million. For 1947 the company reported a small deficit—even after an \$11.7-million tax credit. But last year North American earned \$7.3-million, and this year is almost bound to be up again. Except for 1947, the company hasn't missed paying dividends in 14 years.

• **Guiding Hand**—The man who can take the bows for much of this record is James Howard Kindelberger, president from 1934 to 1948 and chairman since then. Though only 55, Kindelberger is one of the old-timers in the airplane business. He first got plane-conscious during World War I, when he transferred from the Army Engineers to the air branch of the Signal Corps, forerunner of the Army Air Force.

Shortly after the Armistice, he took a job as draftsman at the Glenn L. Martin plant in Cleveland. In 1920 he became chief draftsman and assistant chief engineer under Donald W. Douglas, then Martin's chief engineer.

A few months later, Douglas left Martin to form the Douglas Aircraft Co. in Los Angeles. He asked Kindelberger to go along as chief engineer. Kindelberger accepted five years later, in 1925. His classic explanation: "Had to save up the fare."

Nine years later, as vice-president in charge of engineering, he had over 400 engineers working under him. But

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LOOK FOR THE WATERMARK

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as Douglas had left Martin, so Kindelberger left Douglas—to head his own company.

• To Baltimore—In July, 1934, Kindelberger became president of General Aviation Mfg. Corp. in Baltimore. General was a subsidiary of North American Aviation, Inc., then a holding company with interests in several airline companies and manufacturing firms.

At one time, it held stock in such companies as Douglas, Sperry, Curtiss-Wright, Fokker, and the two predecessor companies of TWA. And it owned outright the company that is now Eastern Air Lines. It disposed of the first three in 1933—to the new Sperry Corp. In 1934, when the air mail act came along, it had to sell its interest in TWA.

However, the air mail act didn't prohibit a manufacturer from engaging in airline operations itself—only from owning stock in a carrier. So the company continued to operate Eastern as a separate division. It finally sold it, in 1938, to the new company formed by Capt. Eddie Rickenbacker, who had headed the division. The price was \$34-million; today you couldn't buy it for 10 times that.

• Spindly Start—When North American was reorganized due to the 1934 law, Kindelberger moved up from General Aviation to president and managing director. It was a spindly little company when he took over. The assets (aside from the Eastern Air Lines Division, which wasn't worth much then) included a tiny order for trainers, a fighter that didn't fly, and a shopful of skilled Dutch mechanics (inherited from Fokker).

The fledgling company had just nine weeks to build a trainer for an Air Corps competition. And, handicapped by NRA's 40-hour week, it didn't look possible. But one night Kindelberger returned to the plant to find the workmen singing and yelling lustily—and building the airplane. One of them explained:

"After eight hours' work, we ring out and go to Helen's place for beer. Then we come back, and we have some real fun getting the plane together. There's no law against having fun."

They won the competition.

• Back to L.A.—On the strength of the orders that followed, Kindelberger moved the company to Los Angeles. He took with him J. L. Atwood, then his chief engineer, now president, and 72 other employees. Together, they started building the NA-16—first of a long line of trainers that proved to be North America's bread-and-butter planes between wars.

In 1938, the British government ordered 200 North American trainers. Delivery was so fast that the British

asked Kindelberger if he could provide fighter planes, too. Trouble was, North American had been building only trainers, had no fighter design.

• **Room Into Loft**—But Kindelberger and Atwood turned their London hotel room into an engineering loft for a couple of nights and came up with plans for a new fighter. They spent the next night selling the British on the plane—the famous F-51 Mustang, which, in modified form, is holding its own today against Russian jets.

Kindelberger and Atwood hurried back to Los Angeles, where North American engineered and turned out the first Mustang in the amazing time of just 127 days. Later in the war, North American added the B-25 Mitchell bomber and still later the F-82 twin Mustang, which is now fighting in Korea.

• **Where to Go**—At the peak of war production came the time for decision on a postwar course. After Kindelberger had scratched off nonaviation products, he was left with airplanes. But what kind of airplanes?

Kindelberger couldn't see getting into airliner competition. The only plans he had for passenger ships were years out of date. And the market seemed to be nicely taken care of by planes already in production or far advanced on the drawing boards.

So military planes seemed to be the answer.

• **One Fling**—But Kindelberger made one exception. On the strength of rosy predictions about private flying, North American decided to bring out a private plane—the Navion. When it started tooling up in 1945, the Navion was scheduled to cost around \$3,000. When the first one was ready for sale in the fall of 1946, the price tag was \$6,100. That was quickly boosted to \$7,500. And still North American lost money.

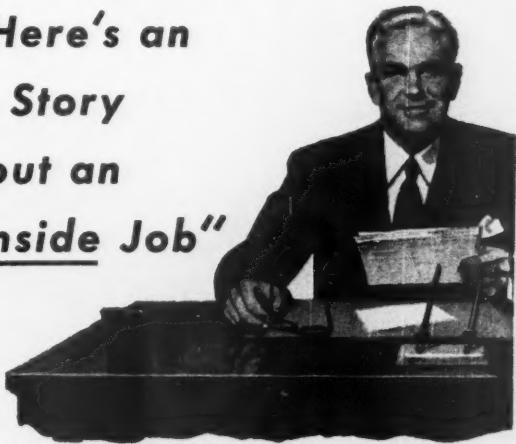
Shortly after, the private-plane market collapsed. In 1947 the company stopped production, sold the Navion lock, stock, and barrel to Ryan Aeronautical Co. Total loss on the venture was about \$8-million (which explains the lone deficit and the lone year without a dividend). That was the end of side excursions. Since then, Kindelberger has steered his company firmly down the sure road of military production.

• **Executive Chief**—Kindelberger moved over from president to board chairman in May, 1948, when General Motors sold the 29% stock interest in North American that it had held since 1935. Actually, the change didn't mean much. Although Henry Hogan, GM's chief counsel, had occupied the chairman's chair, GM had never interfered with North American's activities. As the new board chairman, North American's

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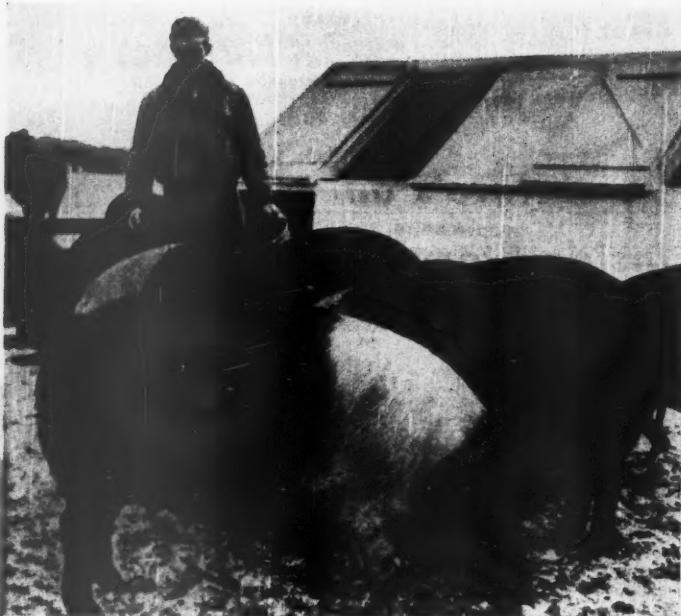
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PROGRESSIVE CHEMISTRY FOR A CENTURY

1948 annual report announced, Kindelberger "continues as chief executive officer of the company." At the same time, Atwood was made president.

One of Kindelberger's big contributions to aircraft manufacturing has been his insistence on subassemblies. A big part of North American's engineering time is devoted to designing all large assemblies, such as wings and fuselage sections, so that they can be built up from smaller subassemblies. Most equipment and furnishings can be installed before final assembly.

Another of Kindelberger's pet ideas is accessibility. The T-28 trainer is built with detachable fuselage, side panels, and engine cowlings. That makes it easy to get to the plane's insides for inspection, repair—and teaching. The tail of the F-86 jet fighter is detachable (picture, page 32) to give mechanics easy access to the jet engine.

• **Missiles**—Kindelberger is also one of the industry leaders in the guided-missile program. While North American has been preparing for stepped-up plane production, it has also been planning for the day when the piloted airplane is obsolete. North American's Aerophysics Laboratory at the Downey plant has long since passed the experimental stage; it's ready for actual production of ground-to-ground missiles. This laboratory also turns out the subminiature electronic parts to guide the missiles (BW-Mar.11'50,p.50).

Models are tested in North America's supersonic wind tunnel, largest privately owned tunnel in the industry. Actual missiles are tested at the Aerophysics field laboratory, a 600-acre site high in the Santa Susana Mountains, northwest of Los Angeles.

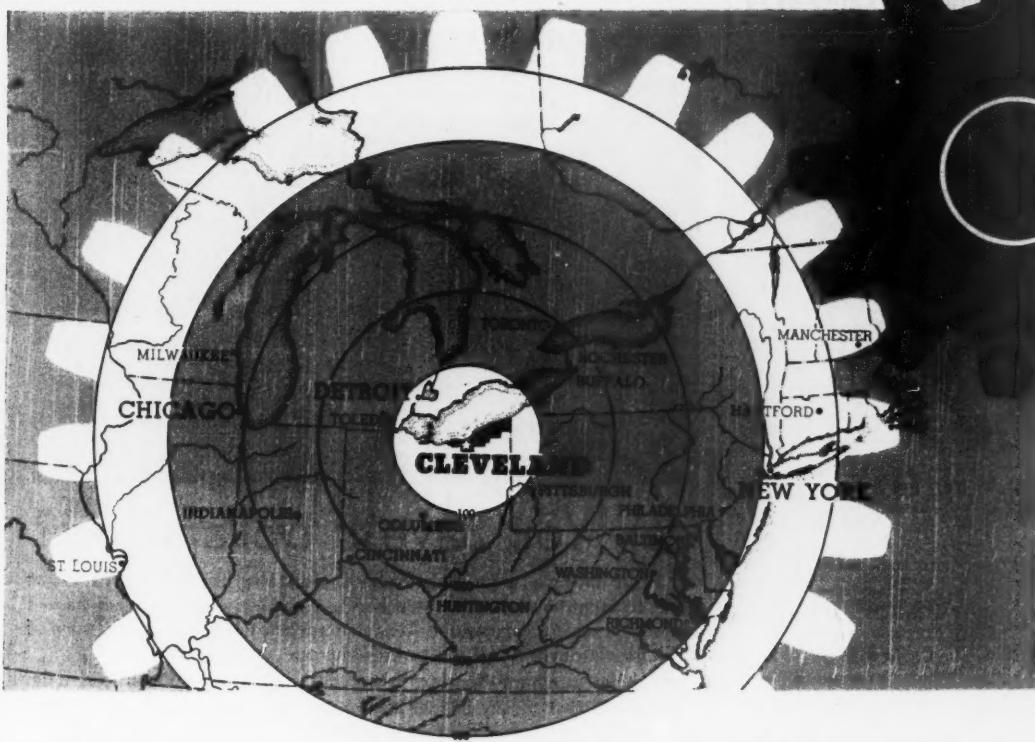
First star performer at Santa Susana was the NATIV (North American Test Instrument Vehicle), used as a test vehicle for aerodynamic research. The huge missile, 13 ft. long and 18 ft. in diameter, has reached altitudes of 10 mi. at supersonic speeds (picture, page 34).

• **Views on Production**—Kindelberger has no qualms about production problems. He believes firmly that a lot more defense output can be piled on top of the civilian economy. And if people don't want to cut down on civilian goods, he has an answer for that, too—a 45-hour week at straight pay.

"Obviously, this isn't going to be popular," he says. "But we'd gain a lot. And we wouldn't have to cut down too much on civilian stuff."

When it comes to manpower for airplane factories, Kindelberger expects to get it mostly from curtailed manufacturing in other lines. He points out, as an example, that if we cut housing from 1,400,000 to 900,000 new starts it would automatically save 500,000 sinks, 500,000 stoves, and so on.

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MANAGEMENT



Can You Save If Dollars Sag?

Every day or so, a top executive faces something like this: Joe, his bright young assistant, needs some personal advice. Joe has a few thousand stashed away and wants to hang onto it. He's alert enough to realize that the value of his dollars is dropping all the time. How can he protect himself?

It's easy to remind Joe that, falling dollar or no, he needs to have some cash on tap; that money he's saving for some definite purpose in the next two or three years should be in something he can cash anytime without taking a loss.

But what about Joe's long-term savings? That's a hard one; a lot of top executives are pretty baffled about what to do with their own money (BW-Oct. 7'50,p.24).

At McGraw-Hill Publishing Co., which publishes BUSINESS WEEK, such questions are likely to wind up at the company's Economics Dept. They come in often enough so that the department has prepared an analysis of the small investor's problem in a period of inflation. Businessmen who have to answer the same question may find some suggestions in this summary:

Economic history tells us this: Much of it has been made by wars. Since 1800, most of the peaks in business activity, stock prices, and commodity prices have shown up during or right after major conflicts.

So war or near-war with the Communist half of the globe is going to hit you in your private purse—for better or worse. You'll feel it whether your private fortune is large or small, whether it's invested in blue-chip stocks, cocoa beans, or a little home in the country. The value of cash is affected most of all.

A dollar that you put in the bank in 1941 is now worth only about 60¢ in buying power, if it's still there.

The reason, of course, is that war brings on price inflation. The goods

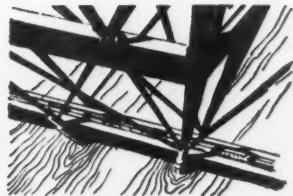
that producers get money for are blown up; they don't go into Joe Doakes' home. But the money supply swells; as it does, it puts pressure on prices.

Even with price controls, the pressure is still there. When the lid is removed, as after World War II, prices go up.

I. What Happens to Savings?

All this makes it plain that it's not very smart to keep more cash than you need to meet emergencies. Inflation cuts the real value of the dollar and hence the value of cash holdings. That's also true of the best bonds, which scarcely fluctuate in price and are much the same as cash.

So a penny saved today is hardly a



76% Increase in revenue— 50% Saving in locomotive expense

THE Wabash Railroad's new GM Diesel-powered "Blue Bird," put in service February 26, makes a complete round trip between St. Louis and Chicago every day. This Dome-car Streamliner replaced two trains making a single trip in each direction.

Here are the accomplishments of the "Blue Bird" in its first six months of operation:

Increased passenger revenue per train mile.....	76%
Reduced fuel cost.....	51%
Reduced locomotive repair cost per mile ..	47%
Increased utilization of equipment.....	100%

Facts like these explain why General Motors locomotives save enough in a few years' time not only to pay their cost, but also to purchase other new equipment needed by the railroads for better service in peace or war.

Strong, solvent railroads in the hands of competitive industry are essential to America's prosperity and growth. Sixteen years of main-line experience proves that dieselization with General Motors locomotives is the soundest investment railroads can make.



A Green Light for Economy in Railroad Operation



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Over 80 Mississippi communities have held successful bond elections to date—proof of their attitude toward new industry.

In addition to the financial benefits of BA WI, you also can count on ready assistance with your problems, before and after your operation begins. The Agricultural and Industrial Board, composed of non-paid business, government and professional leaders, is anxious to help you make your operation a success.

For Complete Details Concerning Your Requirements Write:

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AGRICULTURAL AND  INDUSTRIAL BOARD
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penny earned in the long run. This points to borrowing and paying back later in dollars that have less purchasing power.

But wait a minute, there's a hitch here. Let's say you've borrowed a lot of money to buy a house, and your income doesn't keep pace with the increase in the inflated cost of living. In that unhappy event, you are apt to end up short of money to handle the payments.

II. What About Commodities?

Inflation makes commodities worth more. Even if prices are controlled, they can be expected to rise after the controls go off. That's why professional speculators rushed to buy wool, tin, sugar, and other foodstuffs the day after war broke out in Korea.

This is particularly true of imported commodities, supplies of which may be cut off by a war. In the last war, the favorite was pepper. It went from 34¢ per lb. to 60¢. However, unless you have a lot of storage space in your cellar, a carload of pepper can cause a lot of sneezing before you figure out where to keep it.

• **Futures**—The usual thing is to buy commodity "futures"—contracts for future delivery. But that takes a large minimum investment. In the case of corn, for example, you must buy at least 5,000 bu. at about \$1.50 each, or \$7,500. You can buy on credit, putting up a cash "margin" of only 15%, or \$1,125. But you have to be ready to put up more cash if the price goes down. And if the government has its way, the easy credit terms may be out next year.

Because of violent fluctuations, commodity markets are a poor place for the amateur investor.

III. Real Estate Then?

If the economics of war turn out anything like we've anticipated, good land will rise considerably in value. And so will a well-constructed home. Not only will land be worth more in terms of devalued dollars, but the increase in our population is going to require a big increase in living space during the next 10 years. And the emergency may hold up construction.

• **Farm or City**—Under the government's present agriculture policy, farm real estate has some special features—it's fairly deflationproof, A-bombproof, and the farmer is draftproof.

But if you are going to buy a farm, be sure you either know the farm business or have a wife who does. Otherwise, the errors you make as a city farmer will eat up all your gains.

About the pitfalls of city real-estate buying for investment—slow sales mar-



Wagner Transformers supply Consolidated Vultee the power to build power for peace

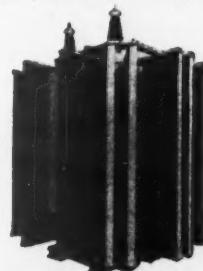
The Consolidated Vultee Aircraft Corporation division at Fort Worth, Texas is busily engaged in a project of tremendous importance to the security of us all—the manufacture of the gigantic B-36 Air Force plane. This Far-ranging intercontinental bomber is a miracle of flying might to the average layman—a marvel of aeronautical engineering. But the supply of power behind its fabrication is well-known to many industrial plants—large and small—throughout the U. S. A.

Banks of Wagner Power Transformers, like the one pictured above, supply the power at Consolidated Vultee's Fort Worth plant where this plane is manufactured. And many thousands of other Wagner Power and Distribution Transformers, of all types and sizes, supply power to industrial, commercial, urban and rural power consumers in every corner of the country.

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ket, maintenance, risks of picking the wrong location, and others—most executives know from personal experience.

If you're thinking of building a new house, here's some advice from a leading private consultant in housing and construction economics: "Let your contract early next year—you'll never get it so cheap again."

IV. The Stock Market

Theoretically, the stock market should thrive on inflation; stocks represent ownership of companies that will benefit from higher prices. But it hasn't always worked that way. For the first part of World War II, the stock market went down.

One advantage of common stocks is that they are so easy to buy and sell. And some good stocks sell for as little as \$10.

One great difficulty is this: Judged by the record, the market level today is relatively high. And quick fortunes have seldom been made by buying into the stock market at a high level.

But it's also a fact that as our price level has risen, stocks of well-managed companies have risen, too. If the inflation reaches sizable proportions, stock prices, too, must go up further in the long run. Stocks, unlike commodities, can be held indefinitely, and many stocks pay attractive dividend returns.

• **What Stocks?**—But the problem of what stocks to buy is tough today. Government controls can be expected to hold down prices that otherwise would soar. Excess-profits taxes will hurt some firms, hardly touch others.

Besides this, a stock that is a perfect investment for one person may be a poor investment for another. So, if you want to hedge with stocks, our best advice is to find yourself a competent investment counselor.

• **Guideposts**—Still some broad economic trends will influence stock prices:

(1) In a boom, people are more likely to buy top-quality goods. Thus many companies making higher-priced consumer lines will prosper. So will some department stores—it costs no more to sell a \$75 suit than a \$50 one.

(2) Growth companies are generally hard hit by an excess-profits tax. Tying their earnings to a base period several years past penalizes them for later growth in earnings.

(3) Some industries that find the going rough in normal times may do well in an inflation. The railroads are a case in point. Traffic picks up; government controls hold costs down; and the roads enjoy favorable treatment under an excess-profit tax.

(4) As hard goods become scarce, buying will shift. Recreation, entertainment, clothing, higher-priced food are some that should benefit.

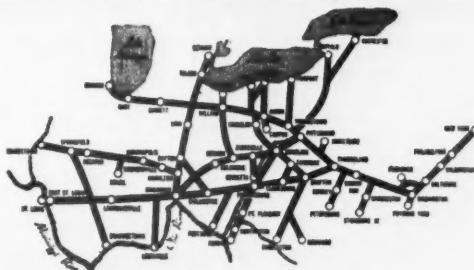


The Proof of the Pudding - is in the Placing!

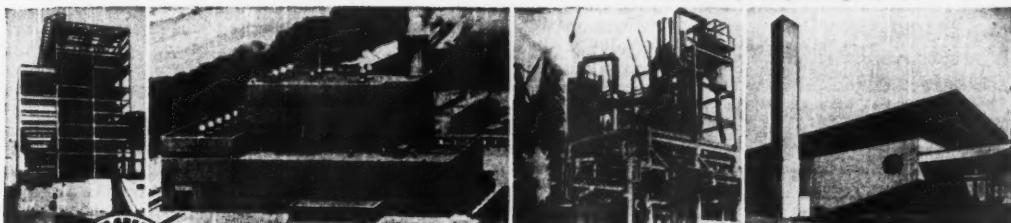
Since the war, more than half-a-billion dollars has been invested in new plants served by the Baltimore & Ohio

→ This half-billion is a *fact*—a fact that proves as no amount of talking can that in B&O territory are vast resources and ideal conditions so vital to successful plant location.

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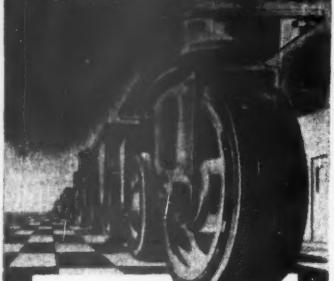
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REGIONS



BETSY ROSES of today have a lot of stitching to do to keep up with Confederate flag orders. These seamstresses work for U.S. Flag & Signal Co., Norfolk, Va.

The Flags Are Flying in Dixie

Demand for Stars and Bars is greater than ever before. Soundest explanation is that it's a fad. Daughters of the Confederacy raise their eyebrows, but business likes it.

Eighty-five years after Appomattox, the Old South has suddenly gone flag-happy. The Stars and Bars are waving in a flurry the like of which Dixie has never seen before, not even in the days of the War Between the States.

Painted flags chug along on jeeps and jalopies driven by teen-agers. Cloth ones float from auto aerials. Smaller fry sport them on handle bars of their bikes. Their elders shoulder them at football games, along with the emblems of their Alma Mater.

• **Nothing Like It**—It's big business. "We can hardly keep up with the demand," says Henry Greene, owner of United States Flag & Signal Co., Norfolk, Va. "We've sold 6,000 since Memorial Day. Usually, that's when the demand ends." His firm hasn't seen anything like it in the 30 years it has been in business. A theatrical costume concern echoes, "We've never known anything like it."

In New York City, Annin & Co. agrees. This year this big flag maker reports demand for Confederate flags is three times as great as it has ever been before.

• **Why?**—Ask anyone how come, and you'll get a shrug or a long, introspective look. It could be Freudian, a repression cropping out after years behind bars. Some lay it to a resurgence

of the old rebel spirit, crusading anew under the onslaughts of the Fair Deal civil-rights program. Some see the dark hand of Russia behind it all. Some say the whole thing started when southern forces invaded Philadelphia last fall at the University of Virginia-Pennsylvania football game.

But the likeliest explanation is more commonplace. It's a fad, this school says, and who can explain a fad? You have only to look at the buyers. Mostly they are teenagers, both boys and girls.

The younger generation's slant is apt to be practical. A 15-year-old reported, "If you carry a Confederate flag when you're hitch-hiking, they're more likely to pick you up, especially if they've got a Yankee license plate on the car."

For the phenomenon isn't limited to the people of the south. In Florida, the flag business is booming, and a lot of the buyers are nothing more than damyankees.

• **Trend**—But apparently, practicality isn't the whole story. There are other signs of a growing sense of southern solidarity. "The South Will Rise Again" has had a flurry among orchestras playing in the Norfolk area. One young group, looking ahead, wants to revive a Confederate cavalry outfit if a girl whose father owns some horses can persuade him to lend them for the pur-



JEEP wears Confederacy battle emblem. Its owner paid \$5 to have flag painted on.

pose: At Virginia Beach, an informal organization, the 102nd Mechanized Virginia Cavalry, Confederate States of America, has been formed by the owners of three jeeps. Its function? "Well," says a member, "we just ride up and down the beach and further the Confederate cause."

• **Misuse**—The United Daughters of the Confederacy have mixed feelings about the ubiquitous outcropping of a symbol that to them has very real meaning. Mrs. Samuel D. West, president of the Virginia Division of UDC, says, "We like to keep the flag before the young people because they do not learn enough about it from their history books, but we fear it is losing its significance through the loose way in which they use it."

Nevertheless, UDC seems to be taking quite a tolerant attitude toward the business.

• **But Profitable**—If it's commercialism of a sacred symbolism, at least it's good for manufacturers and retailers. Small flags (it's the small ones that are making the big sales) that are mounted on sticks brought 25¢ in August; now they're up to 35¢. One alert concern in Columbus, Ga., has caught on to the spirit of the day; it is advertising for sale double-deck playing cards, bridge sets, and cocktail napkins that are adorned with the Great Seal of the Confederacy.

Perhaps the most hopeful view of all is the one that the boom may actually be a sign of greater unity, an indication that the time has come when the South can do some kidding of its own. But not everyone is that reconstructed.



We once knew a young lady who actually liked to handle oldstyle, conventional hectograph units . . . claimed that purple hands did something for her. Her greatest delight was spreading her magenta mitts all over her visitors—a charming miss, if ever there was one!

However, you are probably different and like most people, resent the sight of purple stains on your hands, your clothing and your work. Time was when this condition was the hallmark of the unenlightened office worker . . . born to the purple, as it were. But no longer!

You see, MARATHON Ready-Masters are "Super-Coated." All carbon surfaces and cut edges are sealed with a special coating that safeguards your hands and aids in protecting your work against unsightly smudges and fingermarks.

Then too, if you're getting a trifle bored with the usual purple copies from your spirit duplicator, Marathon offers you a

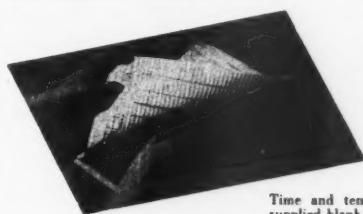
choice of a good, solid black and a blue as well as purple . . . all "Super-Coated"—super-clean!

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Please send me samples of Marathon Ready-Masters and information about their many uses. Check color desired Black Purple Blue

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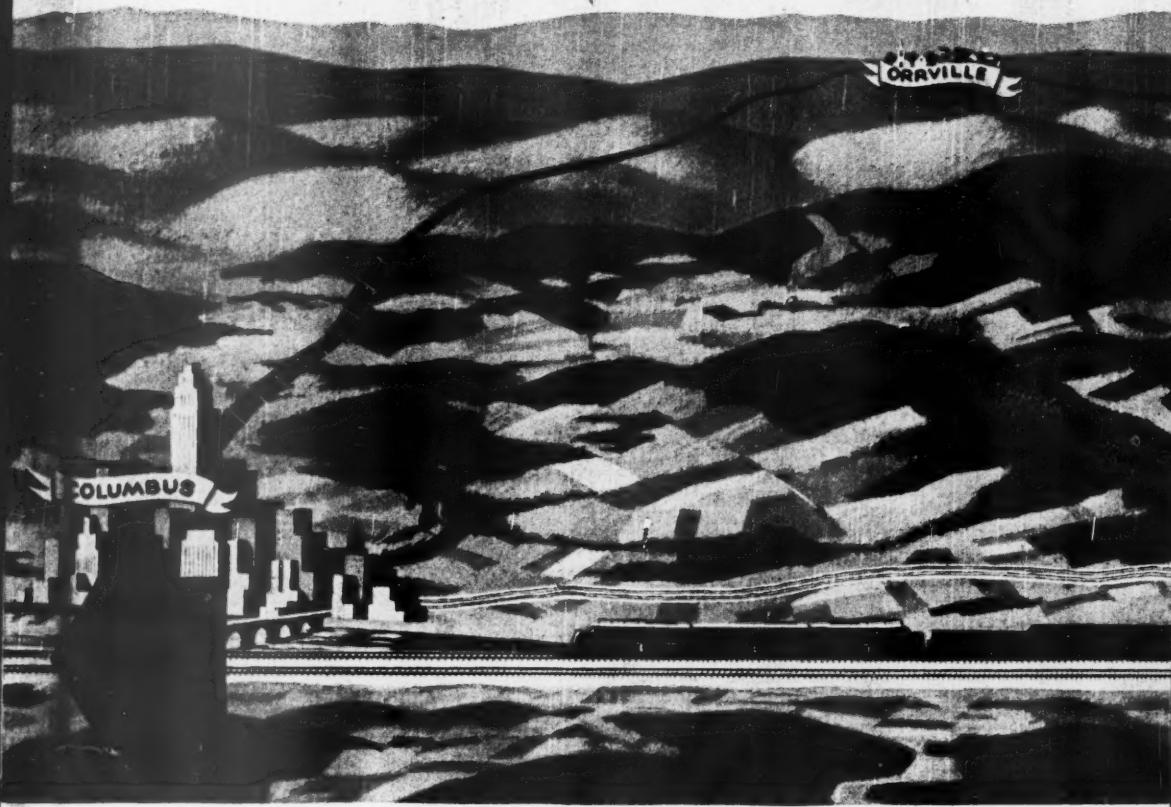
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between the East, West, South and Southwest**



They can't come too big for us now!

Supersize open loads and big box cars now move as fast as any other freight over the Pennsylvania's Panhandle Division, an important link in the short, direct route between the East, West, South and Southwest.

We've wiped out four old tunnels near Steubenville, Ohio . . . tunnels that restricted the movement of big box cars and extra high and wide open loads. Open cuts now replace those tunnels. Much of the right-of-way has been relocated, grades and curves reduced.

No more detouring . . . no more extra switching . . . no time-loss in transit. Everything travels direct.

This improvement alone has cost nearly \$9 million. But that's only part of the over-all improvement program. Altogether, we're spending \$81 million for improvements between Pittsburgh and St. Louis to save shippers time and money.

It's this kind of progress that gives life to the policy of the Pennsylvania to keep pace with the meteoric growth of the South, the Southwest and West and to provide the finest, fastest kind of freight service.



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with open cuts to give shippers a shorter direct route
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OLD DETOUR
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PRODUCTION

More Benzene From Oil

New refining processes are solution to benzene pinch. Other sources—coke ovens and imports—are stretched to the limit. Universal, Shell, Socony, and Atlantic pace new techniques.

Back in the 30's, benzene was a glut on the market. Today, it's almost critically short. Supply has been building up all the time, but demand has been building up faster with the development of new products that depend on benzene as a raw material (BW-Nov. 4 '50,p68). Styrene, an ingredient of synthetic rubber and plastics, is one of these. Nylon and synthetic detergents are others. Fully half of total benzene supply pours into these new products.

• **Growing Shorter**—The drink will be even deeper next year. Total supply of benzene is running about 211-million gal. a year. Yet, this year it will fall short of demand by about 30-million gal., and next year, demand is apt to go up another 20-million when the government's reactivated synthetic-rubber plants get into full production.

• **Petroleum's Part**—You can count on the petroleum industry to close up that 50-million gal. gap. Not this year or next, but bit by bit refiners will be getting into the benzene market and expanding their capacity, now that the pinch is really on.

Right now, petro-chemistry accounts for only about 4% of total benzene supply. The steel industry provides the bulk, turning out 177-million gal. annually from its coke ovens. Imports make up the balance—at a rate of 25-million gal.

• **New Processes**—But refiners have developed at least three new processes that will boost their benzene output in the near future. One of these is a refining unit called a platformer. Universal Oil Products Co., which developed the platformer recently, already has six of the units under construction. They will have daily outputs of from 63,000 gal. to 189,000 gal. each. And last week Shell Oil Co. announced that it had contracted for two platformers to add to its own refining facilities. One platformer is already in commercial production at Old Dutch Refining Co.'s Muskegon (Mich.) plant.

Two other competing processes are in the offing. Socony-Vacuum Oil Co., Inc., and Atlantic Refining Co. are about ready to announce processes that hint at more benzene capacity. Socony-Vacuum developed its method to upgrade the octane rating of gasoline, but

it could be converted to handle benzene. An improved catalyst of Atlantic upgrades petroleum stocks, too, promises another approach to benzene processing.

• **Convertible**—Most of the platformer units are probably slated for gasoline refining. But they could easily be converted to benzene production, and their total production, combined with other refining units such as hydroformers and dehydrogenation plants, could meet the benzene shortage comfortably.

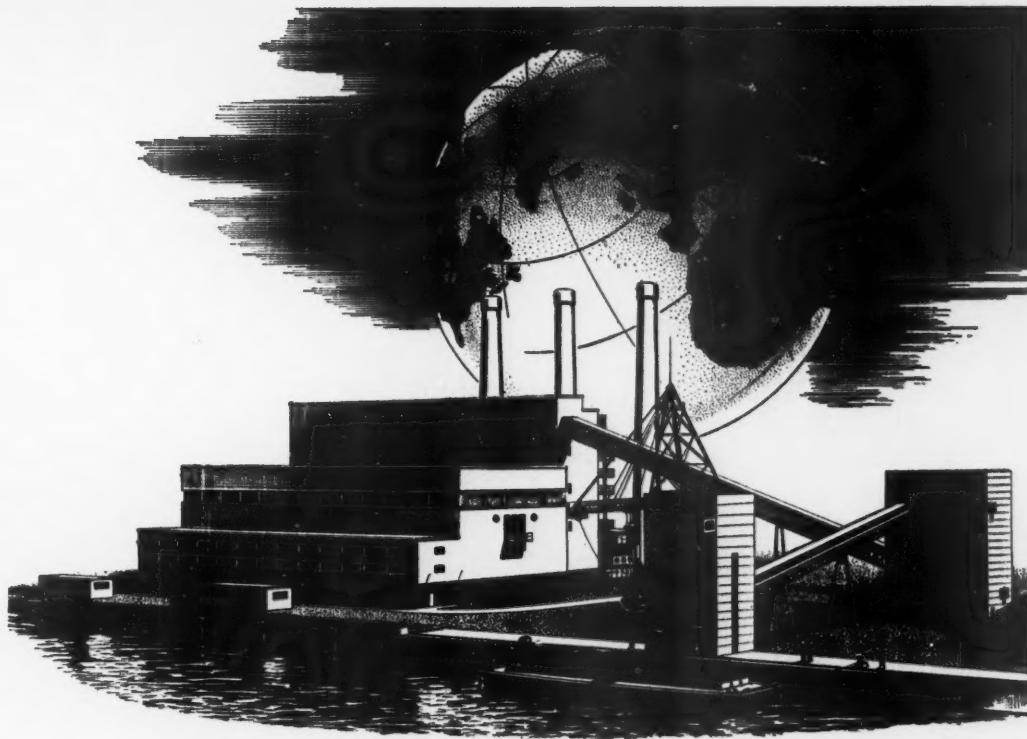
Until platforming gets into high gear, these two older processes will supply the bulk of synthetic benzene production. Two of the biggest individual producers of synthetic, Pan American Refining Corp.'s chemical division and Shell Oil, each get an annual output of 5-million gal. by these methods. In a pinch, about 25-million gal. more benzene could be produced by other hydroforming plants.

• **Logical Choice**—The petroleum industry is the logical choice to boost benzene production. The two other sources—coke ovens and imports—have been stretched to the technical and economic limit. Imports at best are only a temporary help to our own shortage. The countries that now export benzene to us will soon have developed their own synthetic-rubber and plastics industries to the point where they cannot afford to ship benzene to the U.S. Besides, imports are a highly undependable source for this strategic chemical in time of war.

Coke ovens—presently the biggest producers of benzene—probably won't expand much beyond their present capacity. They haven't in the past. In the last 14 years, demand for benzene has jumped 450%. Coke capacity increased only 80% in the same period.

And in the future, as new coke ovens are built, they probably won't add much to benzene output. They will be replacements for many ovens that actually are about ready for the junk pile today.

• **Distant Drawback**—There's one long-range drawback to petro-chemical production of benzene, though. Our petroleum supply won't last forever. So both industry and government are scratching around for other sources of



POWER for World Peace

Few will deny that a good living standard is an important ingredient of peace. In the world of today, such a standard of living can be attained only when man's capacity to produce goods of all kinds has been multiplied many times by the use of electric power.

Therefore it is a source of great satisfaction to Combustion Engineering-Superheater, Inc. that it has been able to play a large part in the post-war rebuilding and expansion of power generating facilities throughout Western Europe, as well as in Turkey, Israel, Arabia, India, Africa and, in fact, wherever free peoples seek to restore and improve their economies.

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raw materials from which benzene can be extracted. Centuries after the last of our petroleum reserves are depleted, there will still be lots of coal lying in the ground. And government research is banking on that as its best bet. Still another alternative is oil shale.

Dept. of Interior recently proposed a coal hydrogenation plant for benzene extraction that would more than take care of our future needs. Interior expects to have a plant of 35-million gal. of benzene capacity. It will cost \$250-million and will take three years to build. Estimated sales price for the product: 35¢ per gal.

• **Best Bet**—Close-range hopes are pinned on the platformer. To cut down critical materials and technical manpower, a platformer can be added to an existing refinery as sort of an accessory. This way universal experts figure that platforming can turn out benzene for 25¢ or 30¢ per gal. The exact cost depends upon the existing refinery equipment and the characteristics of the charge stock.

Starting from scratch, a refiner would pay about \$5-million for a complete platforming plant with benzene capacity of 42,000 gal. per day. The cost would be much less for a refiner already equipped with facilities for stocking and separation.

One of the big features of platforming is that it doesn't affect aviation-gasoline production. Platforming uses the hydrocarbons from a feed stock that doesn't go into avgas. Other petro-chemical processes turn out benzene only at a sacrifice of gasoline output.

• **Adaptable Chemistry**—It is easy to convert platformers built for gasoline production to benzene without modification. Instead of the usual straight run or natural gasoline of conventional plants, the unit uses a charge stock that forms a small fraction of ordinary feeds. The cut contains cyclohexane and methycyclopentane, which are the hydrocarbons to be converted into benzene.

There have been different ways developed to change these two into benzene. But they are all multistep processes. Platforming does the job in one step. What comes out of a platformer is a mixture of liquid hydrocarbons that are broken down into benzene and other byproducts by simple, conventional methods.

The charge stock used for platforming—the cut of petroleum containing a portion of the cyclohexane and methycyclopentane—is taken from natural gasoline or other refinery products. Practically all of the two hydrocarbons is converted into benzene. A charge that contains 10% of the two will yield nearly 10% benzene.

Catching up with criminals now made easier through microfilming



Before . . . witnesses to crimes in St. Louis scanned crowded rogues' gallery files in an effort to identify the wanted criminal. Oftentimes, after peering at hundreds of photographs for less than half an hour, they called it a day—too confused to be sure of identification. Could anything be done? Every hour lost helped the "getaway."

The new rogues' gallery—unique in style—simplifies the job immeasurably. Recordak microfilm copies were made of the front and profile pictures of 62,000 past offenders. Then the tiny film images were attached to tabulating cards, which were punched and filed according to the criminal's description and type of crime committed.

Fast, convenient review of suspects. Now, after the criminal is described, a sorting machine quickly delivers the cards in specified categories. Then, the Recordak microfilm images—without being removed from the cards—are projected. Thus, the suspects appear—larger than life-size—one at a time—*much easier for witnesses to identify.*


The use of Recordak microfilm in conjunction with punched card systems may suggest new economies to you. For example, in filing engineering drawings, photographs, maps, title records, etc. All popular uses today!

And this is just one of the ways Recordak microfilming is serving 65 different types of business, thousands of concerns.

Remember—it can also speed your accounting routines; cut your filing space requirements as much as 99%; provide unparalleled protection for your vital business records and other documents.

For complete details on Recordak microfilming, and its surprisingly low cost, write for a free copy of "50 Billion Records Can't Be Wrong," Recordak Corporation (Subsidiary of Eastman Kodak Company), 444 Madison Avenue, New York 22, N. Y.

"Recordak" is a trade-mark



RECORDAK
(Subsidiary of Eastman Kodak Company)

**Originator of modern microfilming—
and its application to business systems**

*Christmas
Remembrance
for an Executive*



The 1951 Dartnell PERSONAL RECORD BOOK

Here is a de luxe personal desk book for you which combines the functions of a diary, appointment book, and private financial record all in one, plus special charts and pages of business data which will save you hours throughout the year. Published each Christmas for thirty years, it is the choice of America's top-flight executives and high Army and Naval officers who prefer it because it is the finest personal desk book of its kind in the world. Each Personal Record Book is bound by hand in fine imported leather. Printed on superfine paper, size 5 by 8 inches. The 200-page Diary Section is ruled off by hours as well as days and provides generous writing space. The 200-page Data Section includes sections for Income Tax Deductions; Stocks, Bonds, Insurance Records; Stock Market Price Ranges; Mark-Up and Discount Tables; Railroad, Air Fares; Best Hotels in Principal Cities.

Individual name can
be stamped in gold on
the Personal Record
Book for 30 cents ad-
ditional charge.

Price \$5.50

A Superb Business Remembrance

Order one of these de luxe Personal Record Books for your own use—you will be delighted with it. Then consider buying a quantity to give as your business remembrance this year to customers, friends, colleagues. These books will be appreciated and used every day throughout 1951.

PLACE YOUR ORDER NOW



The Dartnell Corporation
4135 Lawrence Ave., Chicago 40, Ill.

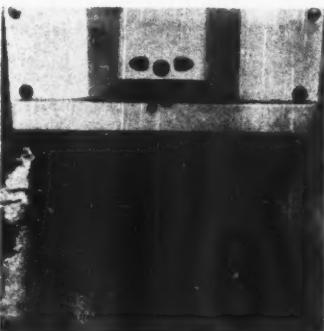


PAVEMENT CHEWER, built by Joy Mfg. Co. for Cleveland Electric Illuminating Co., replaces pick and shovel with engine-driven, carbide-tipped cutters.



TWIN CUTTERS aren't fazed by asphalt or 15 in. of concrete. They revolve and "dig" as machine inches along the street at speeds up to 5 ft. per min.

Buzz Saw Cuts Headaches



RESULT: Narrow slots that minimize street damage. Work is fast and cheap.

Utility companies don't like the idea of cutting up a pavement for necessary installations any more than the citizens like to have the streets put out of commission. It's a costly, lengthy, noisy job.

To take some of the grief out of pavement-breaking, Cleveland Electric Illuminating Co. has worked with Joy Mfg. Co. of Pittsburgh to develop a mechanical pavement cutter. It chews a narrow slit into the toughest kinds of streets—at a respectable speed, too.

The machine is mounted on rubber tires, weighs 15 tons, is powered with a 75-hp. engine. Going to and from a job, it travels through direct gearing at 12 mph. On the job, hydraulic drive pushes it along at 5 in. to 5 ft. per min. Its carbide-tipped cutters can chew

"Station P," on San Francisco Bay—one of P. G. and E.'s expanded network of 74 electric generating plants.



Abundant resources—lumber, metals, oil, clay and others—available nearby.



Farm income in California, alone, is over \$2,000,000,000 a year.



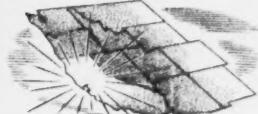
Fine transportation reaches all the 11-state West.



Fastest-growing market in the U.S.—2.3 times national average.



Year-round healthful living—plenty of room, sun—fine schools, recreation.



Strategic Northern California is GHQ of the 20-billion dollar bonanza market of the West.

You can best serve all the West from Northern California

Northern California not only provides quicker, easier and more profitable contact with the mighty 20-billion dollar Western market, but is itself a rapidly expanding, richly endowed market. In the last 10 years Northern California's population has increased over 50%, individual income is up 202% and farm income is up 217%. Here in this rapidly growing area P. G. and E. offers you gas and electricity at rates among the nation's lowest. Plentiful reserves of electric power already have been provided by this Company's billion dollar postwar expansion program. And we are building more new facilities for future growth. Companies interested in locating here may have, upon request, data on industrial sites to meet their specific needs.

PGE
and

Pacific Gas and Electric Company,
San Francisco, California



Speeds Up Wrap-Around Fastening Of Cords, Wire, Fabrics, Bags

"SAVED 40%" by switching from single "hog rings" to magazine-fed Bostitch P7 stapling pliers for assembling divan springs . . . and got a tighter clinch," reported this furniture maker. "Nothing like them for binding lead wires together in capacitors," wrote an electrical manufacturer. Automobile seat cover dealers agree "Bostitch P7 is so quick and easy!"

Investigate. See for yourself how Bostitch P7 stapling pliers transform pre-formed staples with $\frac{1}{2}$ " openings into $\frac{1}{4}$ " rings. See how these "hog rings" prevent rope from fraying, how they seal plastic bags in frozen food lockers, how they cut costs of making wire pens and lobster pots. Use the coupon below for more information.



STITCHING STEEL RIMS TO BARRELS
with Bostitch wire sticher holds heavy plywood bottoms securely. Opened up new markets for this barrel manufacturer because of barrels' increased weight-carrying ability.



COSTS CUT 30% sealing cartons for heavy porcelain table tops when ingenious foot-operated Bostitch Autocinch staplers replaced tape. This unique self-clinching staple method let this firm put carton sealing into production line.

WANT TO CUT YOUR FASTENING COSTS, TOO? Chances are that your toughest fastening problem has already been solved by one or more of the 800 Bostitch machines . . . staplers, wire-stitchers, hammers, tackers. 300 field men in 112 key cities in the U.S. and 11 key cities in Canada are ready to help you choose the right machines for your job. In the meanwhile, mail the coupon below for information about specific Bostitch machines.

BOSTITCH, 700 Mechanic Street, Westerly, R.I.

My present fastening method utilizes:

Nails Glue Tape Tacks Thread Pins Rivets Spot Welds

I fasten the following materials:

Wood Paper Rubber Plastics Fabrics Leather Light Metals

Please send me literature on specific Bostitch machines for my fastening needs together with your free "Time and Money Saving" book. Also PTG232 on Bostitch P7 Pliers.

Name _____

Title _____

Firm _____

Street _____

Zone _____ State _____

City _____

BOSTITCH
AND FASTER
Fastens it better with wire

ALL TYPES OF MACHINES
FOR APPLYING STAPLES

ALL TYPES OF STAPLES
APPLIED BY MACHINES

through 15 in. of concrete or through 8 in. of concrete with mesh reinforcement, at the rate of 1 ft. per min.

Executives of the Cleveland company expect the machine to triple pavement-opening speed and halve costs.

PRODUCTION BRIEFS

Increased sales of laxatives are the reason for Dow Chemical Co.'s 30% boost in methylcellulose output. Last year's \$100-million laxative market sent sales of the chemical climbing by 150%.

Injection molding is being used by Columbia Records, in conjunction with M&W Co., a New Jersey development-engineering firm, to make 45-rpm. discs from polystyrene on a limited scale. Advantages are cheaper raw materials, higher production rates, and fewer master dies.

Housewarming at S. C. Johnson & Son, Inc., officially opened the wax makers new research laboratory, designed by Frank Lloyd Wright.

Anatomy of Edvac—the electronic "brain" built for the Army Ordnance Dept. by the University of Pennsylvania—is now available in book form from the university's Moore School of Electrical Engineering, Philadelphia 4, Pa.

Koppers Co., Inc., will put the first of the government-owned butadiene plants into operation this month, and a second unit early in January. The Kobuta (Pa.) plants have a combined monthly capacity of 10-million lb. of synthetic rubber.

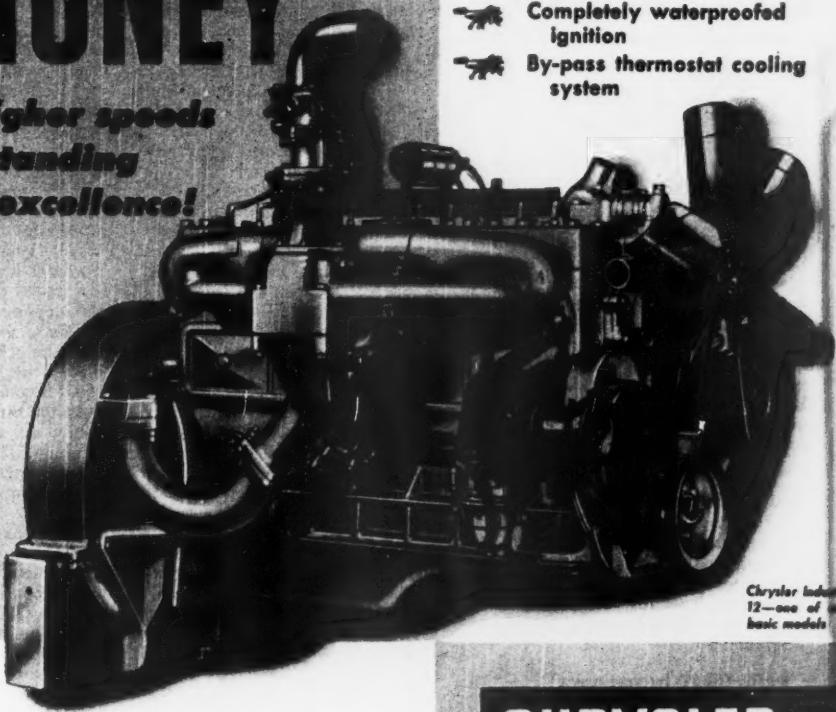
Air-pollution control law proposed in Oregon would require plans and specifications for equipment that might give off fumes to be cleared with the state. Oregon's legislature will get the bill in January.

Magnetic-fluid brake that might replace present automobile types is an experimental project at Rensselaer Polytechnic Institute. The brake operates from a pushbutton electric switch mounted on the steering wheel.

Defense expansions: Westinghouse Electric Corp. is negotiating for a plant site near Baltimore's Friendship airport to meet military demands for electronic equipment. A radio tube plant at Utica, N. Y., will be reopened and converted by General Electric for production of emergency communications equipment.

MORE POWER FOR LESS MONEY

*assured by higher speeds
and outstanding
mechanical excellence!*



Chrysler Industrial
12—one of eight
basic models

THE FACT that a higher speed engine can out-perform all others has long been established. Today, after years of field operation in every type of gasoline powered equipment, it has been conclusively shown that Chrysler Industrial Engines *out-last* and *out-economize* all other similarly rated engines. The reason lies in the

outstanding achievements of Chrysler engineering and Chrysler research in higher alloy steels. And because of Chrysler mass production Chrysler Industrial Engines *cost less!* See your Chrysler Industrial Engine Dealer, or write us. *Industrial Engine Division, Chrysler Corporation, Detroit 31, Michigan.*

Check these Features!

- All friction surfaces Super-finished
- Statically and dynamically balanced crankshaft
- Sodium cooled exhaust valves
- Stellite exhaust valve seat inserts
- Stainless steel valve springs
- Chrome top piston ring
- Completely waterproofed ignition
- By-pass thermostat cooling system

CHRYSLER

Industrial Engines and Power Units

CHRYSLER
INDUSTRIAL
ENGINES



Service Available Everywhere

**I'm SAVING
\$75 A DAY**

with my *Viking*
SPRINKLER SYSTEM

Says a Midwestern Manufacturer

A few months ago I was faced with the problem of nearly prohibitive fire insurance rates on my plant, because of increased hazards involved in my operation. Naturally, I needed a solution to my problem . . . and needed it fast. I called my nearest Viking representative and put the problem squarely up to him. He solved it quickly by designing and installing a Viking Sprinkler system that is tailor-made for my plant. Now I have complete insurance coverage . . . PLUS the assurance that night and day, Sundays and holidays, my plant is FULLY protected from fire. Right now, my insurance savings are paying for my Viking Sprinkler System . . . and, believe it or not, the system will pay for itself in a year and a half.

*Name on request.

You too can get added fire protection . . . at a saving by installing a Viking system in your plant or office. Viking, the leader in the sprinkler field, gives you a system that's engineered especially for you . . . a system engineered to be completely dependable, and trouble-free.

WRITE TODAY for your copy of . . .

"Fire and Your Business" . . . facts on how a Viking System gives you more fire protection at less cost.



VIKING
SPRINKLER SYSTEMS
The Original Name
THE VIKING CORPORATION
HASTINGS, MICHIGAN

The Heat's on Titanium

The U.S. wants it for defense. Industry is expanding its refining plant. Now they are getting together to find ways to boost output, lower costs. The question is: Who will make the next move?

Military planners would like nothing better than to get their hands on a comfortable supply of titanium metal. Its unique properties—lightness, high strength, corrosion resistance—make it a natural for turbine blades, naval devices, aircraft construction (BW—Oct. 1 '49, p66).

But titanium output today is measured in pounds, not tons; cost is measured in dollars, rather than cents per pound. Though raw supplies are plentiful, refining plants are few.

• **Help Coming**—Industry already has a substantial expansion program under way. Last week, National Lead Co. and Allegheny Ludlum, which own Titanium Metals Corp. of America (BW—Jan. 21 '50, p30), said they were planning a \$15-million to \$20-million expansion in titanium extraction operations. The additional output can be processed into metal or into pigment, with markets wide open for both.

Kennecott Copper and New Jersey Zinc already have a \$30-million project under way in Quebec. When it comes into operation, this will be the largest supplier of titanium concentrates.

• **Government Conference**—The government is moving, too. Some 250 experts, both government and industrial, have just had a discussion at the Pentagon on what could be done to lift output. The turnout included top-drawer metallurgists, researchers, and producers.

The two-day meeting was swaddled in hush-hush. But once it got started, word of what was going on began to leak out. And the gleanings give some clues on what's to come.

• **Military View**—On the first day, the military set up the problem. The Research & Development Board of the Defense Dept., sponsor of the program, scheduled reports from technical experts of Army and Navy Ordnance, Bureau of Ships, Bureau of Aeronautics, Air Force technical services and divisions, and the Army Corps of Engineers. Secretary Nathaniel Fick of the RDB, who arranged the proceedings, indicated that censored versions of the papers would be available soon.

Speakers talked about potential uses for titanium, particularly in ships and aircraft. They also noted all its present limitations. The few thousands of pounds now being refined a year are almost all for pilot use. And the price is \$15 a lb. for forgings, \$5 a lb. for "sponge" titanium, a silvery-gray sub-

stance that looks like its namesake.

• **Industry Speaks**—On the second day, both industry and government spoke. Industry papers dealt with characteristics of the metal in tests. The writers conceded that the present method of refining titanium ore and processing sponge is expensive and cumbersome. It takes electric furnaces to generate enough heat to produce ingots, rods, bars, and sheets. And it takes special atmospheres, special cooling processes.

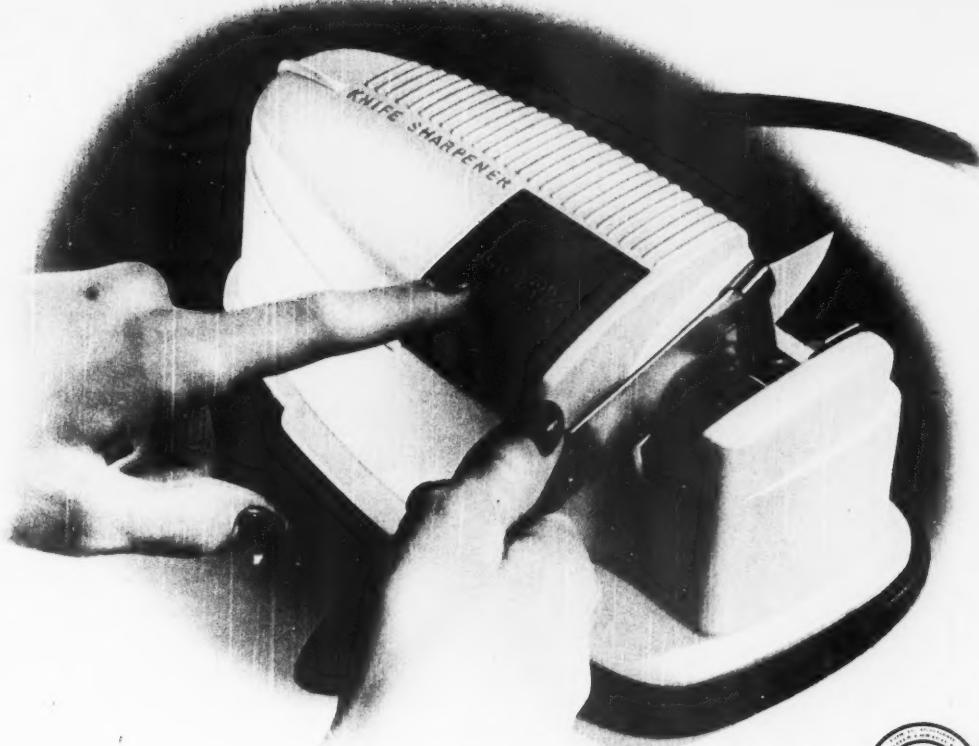
• **More a Must**—Industry and government experts alike agreed on one thing. If titanium is to come into its own as a defense metal, its output will have to be at the rate of thousands of tons a year rather than thousands of pounds.

This brought up the question: What sort of government action is that going to take? Industry people banded around a few government-incentive ideas. Defense contracts for the stuff would be one prop. Another would be accelerated amortization—five years for the depreciation of new plants. It's too risky, said industry spokesmen, for domestic refiners of titanium metal to make a big investment in plants that could become obsolete in a few years.

• **In the Business**—Two domestic companies are now the main sources of titanium. They are Rem-Cru Titanium, Inc., jointly owned by du Pont (Remington Arms) and Crucible Steel; and Titanium Metals Corp. Titanium Metals is mining ore in the Adirondack Mountains, currently the biggest domestic source. But the joint Kennecott Copper-New Jersey Zinc investment in Quebec, which includes a new \$15-million plant, will be bigger.

Kennecott will have a new, reasonably inexpensive ore-refining process, simpler than the one now used. Ostensibly, Kennecott intends to produce pig iron from its Quebec reserves and sell titanium-bearing slag as a byproduct. Most metallurgists believe, however, that pig iron will eventually play second fiddle in Kennecott's production.

• **Whose Move?**—Who makes the next move, the government or the industry? For it looks as though somebody would have to do something. Government people claim output now is so meager that the Munitions Board doesn't even list titanium metal for stockpiling needs. The U.S. Atomic Energy Commission is the only quantity buyer at present, and you have to put quantity in quotes.



Lumarith XF housing molded by Superior Plastics
Division, Commonwealth Plastics, Inc., Chicago,
and Norton Laboratories, Inc., Lockport, N. Y.



When you want FLAME RESISTANT ACETATE
SPECIFY **LUMARITH XF** (FLAME RESISTANT
(CELLULOSE ACETATE)

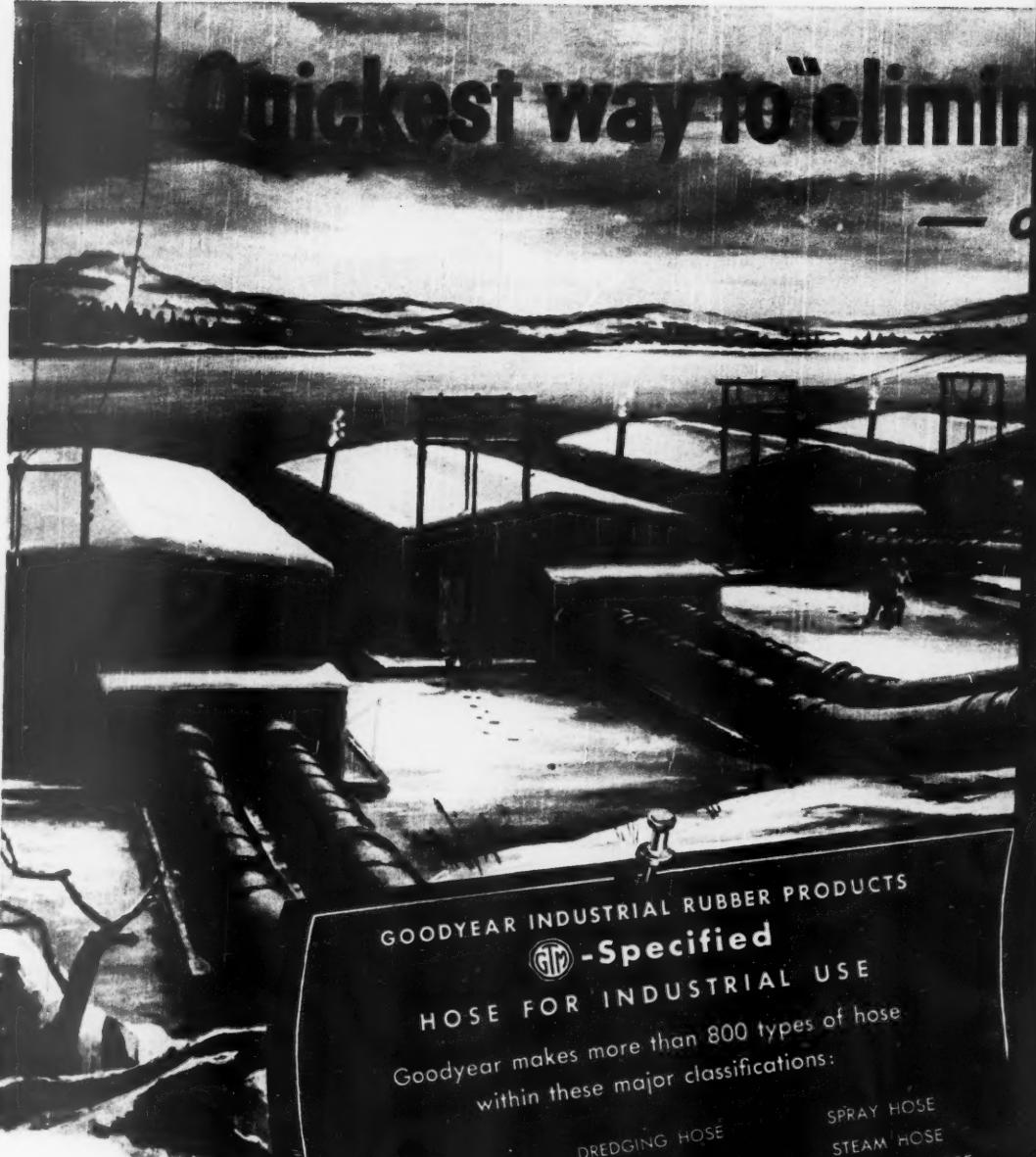
The Cory Knife Sharpener is one of the many UL approved electrical products now benefitting from Celanese research into the flame resistant possibilities of acetate plastic.

By molding the housing of this motorized household appliance in Lumarith XF, the manufacturers have been able to give the housing the important acetate qualities of shatterproof toughness, surface beauty with high speed moldability and at the same time provide a degree of flame and heat resistance that such an electrical application requires.

Perhaps Lumarith XF has the extra qualities your

products need. A Celanese representative can supply you with the answers. Celanese Corporation of America, Plastics Division, Dept. 290-K, 180 Madison Avenue, New York 16, N. Y. In Canada: Canadian Cellulose Products Ltd., Montreal and Toronto.

Celanese*
*Reg. U. S. Pat. Off. **PLASTICS**



GOODYEAR INDUSTRIAL RUBBER PRODUCTS
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HOSE FOR INDUSTRIAL USE

Goodyear makes more than 800 types of hose
within these major classifications:

ACID HOSE

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FOR HOSE, FLAT BELTS, V-BELTS, PACKING, MOLDED GOODS, TANK LINING
built to the world's highest standard of quality, phone your nearest Goodyear Industrial Rubber Products Distributor.

drate a lake or insulate your house

To empty Steep Rock Lake

and uncover a fabulously rich lode of iron ore, engineers pumped 120 billion gallons of water through fourteen lengths of huge Goodyear hose known as Dredging Sleeves. Each two feet in diameter, they served as flexible couplings between pumps and disposal pipe lines.

Weatherproofing homes with rock wool

is an everyday job that calls for another special type of Goodyear hose known as Home Insulation Hose. It has to be built sturdy enough to resist cutting by highly abrasive rock particles, yet be light and flexible enough to manipulate easily in close quarters.

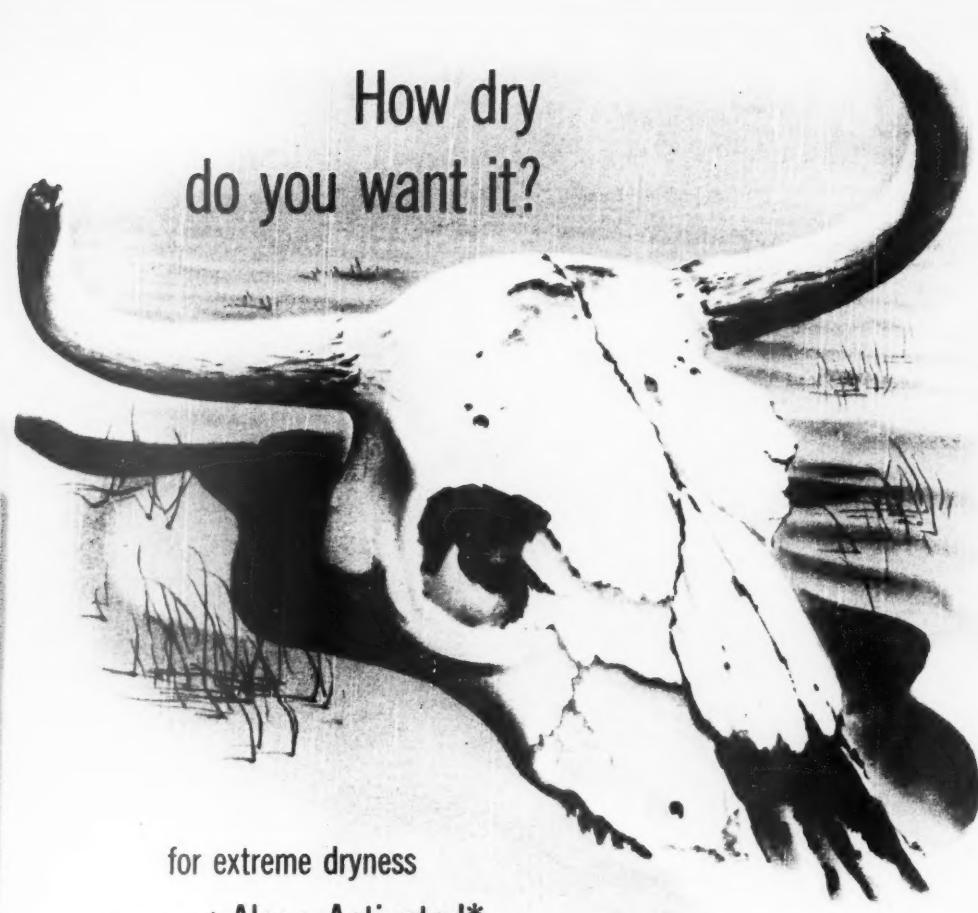


ANYTHING in the world that "flows"—from acetylene gas to molasses in January—can be conducted from here to there, safer, faster and more economically through Goodyear hose. For there are more than 300 different types of hose specially designed by the G.T.M.—Goodyear Technical Man—to handle everything you can think of, and a lot of things like ashes, cement and grain that would surprise you. Because Goodyear builds a made-to-order hose for every job, *industry prefers Goodyear hose over any other kind!*

To get the right hose for your job, see the man who knows hose best—the G.T.M. Just phone your nearest Goodyear distributor, or write: Goodyear, Akron 16, Ohio.

We think you'll like "THE GREATEST STORY EVER TOLD" — Every Sunday — ABC Network

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THE GREATEST NAME IN RUBBER



How dry
do you want it?

for extreme dryness
you need Alcoa Activated*
Alumina

If your business calls for the dehydration of liquids, vapors or gases, you'll want to be familiar with ALCOA Activated Alumina. It is one of the most effective and efficient desiccants you can buy. Dew points as low as minus 100° F., and even lower, can be obtained, and under normal conditions, ALCOA Activated Alumina can be used for an almost indefinite number of drying cycles.

ALCOA Activated Alumina is a commercially pure, highly inert adsorbent. It has high resistance to crushing, shock and abrasion . . . will not swell, soften or disintegrate even when immersed in water . . . is non-toxic . . . non-corrosive . . . practically iron-free. And its relatively low initial cost makes it extremely economical to use.

It is properties such as these that give ALCOA Activated Alumina its wide acceptance as an outstanding drying

agent. Its desiccating properties are used in the chemical, food, pharmaceutical and petroleum industries, in air conditioning and for the maintenance of oils.

Whatever your dehydration problem, you can obtain the desired dryness and maintain it continuously with ALCOA Activated Alumina. It will pay you to investigate. Write to: ALUMINUM COMPANY OF AMERICA, CHEMICALS DIVISION, 6001 Gulf Building, Pittsburgh 19, Pa.

*Reg. T.M., Aluminum Co. of America

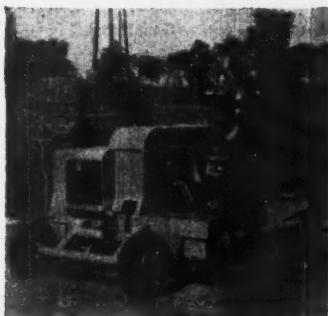
Alcoa Chemicals



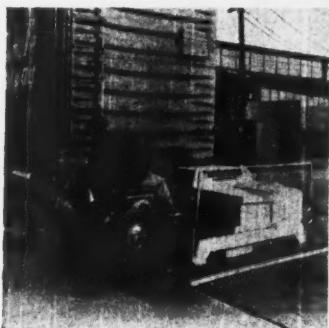
ALUMINAS and FLUORIDES

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ALUMINUM FLUORIDE • SODIUM FLUORIDE • SODIUM ACID FLUORIDE • FLUOBORIC ACID • CRYOLITE • GALLIUM

NEW PRODUCTS



RUBBER ROAD WHEELS straddle track at grade crossing, retract so that . . .



STEEL RAILWAY WHEELS rest on track. Trackmobile then couples to cars.

Rail or Road Locomotive

The wide-open field of materials-handling equipment has another entrant. Whiting Corp. has brought out a gasoline-powered locomotive, called Trackmobile, that can run either on tracks or on the ground.

Trackmobile has two sets of steel railway wheels, two sets of rubber-tire wheels. To move Trackmobile quickly from one track to another around factories or railroad yards, the driver uses the rubber wheels, runs the locomotive on the ground.

When he wants to get on tracks, the driver moves the locomotive across the rails at right angles. He then pulls up the rubber tires and automatically lowers the railway wheels onto the track. Whiting says this operation takes about 30 sec.

In coupling, Whiting uses an hydraulic jack. The jack transfers part of the rail car's weight to the Trackmobile, gives the locomotive a drawbar pull of 7,350 lb.

Whiting's work horse weighs 3 tons, has a top speed of 20 mph. on the

NEW RADIO SYSTEM makes tough jobs easier!

G-E 2-WAY RADIO

"*A Race Against Time*," is the way electrical superintendent George Patrick describes tunnel driving. To speed assembly of manpower and materials where they will do the most good, he uses radio (above).

For Fast Action and fewer headaches on a time consuming job, the Frazier-Davis Construction Company has an answer—radio communication. In driving a 6-mile tunnel through solid rock these contractors use G-E 2-way radio to coordinate work and save time at job sites miles apart. Project supervisors, in their cars 75% of the time, communicate by mobile radio with field offices, supply points, and tunnel crews over a 60-square mile area.

Job Control At Your Finger Tips is what G-E radio communication gives you. In scores of business organizations it pays for itself in a hundred different ways. Let us demonstrate how it can cut your costs, too. Just mail the coupon below.



Nine Miles From Headquarters—but instantly by radio. From one end of 6-mile tunnel supervisor talks into hand microphone, directly to field office.



More Water For New York City will be the end result of this 2-year project in the Catskills near Grahamsville, New York.

HOW MUCH IS Instant Communication WORTH TO YOUR BUSINESS?

General Electric Company, Section 1110-25
Electronics Park, Syracuse, New York

I am interested in radio communication for my business.
Send me FREE BOOKLET on G-E 2-way radio.

NAME.....

TYPE OF BUSINESS.....

ADDRESS.....

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GENERAL  **ELECTRIC**



WHERE ELSE CAN YOU GET ALL THIS?

For Economy • Dependability
Smoothness • Long Life

It's already making a name for itself in leading makes of trucks—Continental Motors' new Red Seal T-6427. It's hauling heavier payloads, maintaining faster schedules, cutting costs by wringing the last ounce from modern fuels.

An unmatched array of quality features tells you why. Check the list below. Compare with other engines, point by point, and you'll know why the new Red Seal T-6427 is the one best choice for high-speed long-distance hauls.

Remember, too, that no matter what your specific transportation job, on or off the highway, there's a Red Seal model engineered and built to do it RIGHT.

Re-designed combustion chamber for higher compression.

New high-output camshaft, with cam contours designed to improve valve action and prolong lives of valves and springs.

New larger diameter sodium-cooled exhaust valves, stellite-faced for resistance to pitting, burning and warping.

Positive rotary exhaust valve action preventing power loss and spring damage due to carbon deposits on valve seats.

Chromium-plated top piston ring at maximum distance below top of piston for higher oil economy coupled with long life for cylinder bore and rings.

Duplex downdraft carburetion.

Automatic heat control for fast warm-up, easy starting, and economical running.

Individually inspected water passages in cooling system. Coolant is directed to hottest areas.

Full-length water jacketing, assuring water circulation completely around all cylinders, prevents distortion and makes for long service-free life.

Continental Motors' patented system of individual porting, assuring uniform distribution of fuel mixture to all cylinders, promoting complete volatilization and burning of "heavy ends" of fuel, eliminating "loading," improving thermal efficiency, and making directional influences of carburetor and air cleaner much less critical.

Water by-pass system and leakproof water pump.

Alloy-steel exhaust valve seat inserts for long trouble-free life.

Non-rusting Silchrome intake valves.

Counterbalanced alloy steel crankshaft with vibration damper; Tocco-hardened journals.

Non-corroding Durex-100 main and connecting rod bearings.

Pressure lubrication with positive-displacement oil pump; Float-O screen assures supply of cleanest oil at all times.

Built-in oil cooler and oil-filter.

Helical-teeth timing gears for silence and long life.

Tappets, bearings and crank seals removable without removing engine or transmission.

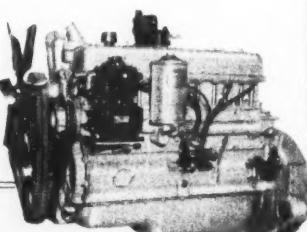
Fuel pump located on engine's cooler side, to eliminate vapor lock.

Expansion-valve type exhaust manifold.

Multi-studded cylinder head for long gasket life and freedom from head distortion.

Three-point suspension.

MODEL T-6427 Six cylinder, overhead valve engine for trucks and buses. 126 to 145 h.p. at 2600 r.p.m.



SERVICE EVERYWHERE

Continental Motors Corporation
MUSKEGON, MICHIGAN

ground, 9 mph. on track. It will be on the market early in 1951.

- Source: Whiting Corp., Harvey, Ill.
- Price: \$7,950 delivered (\$100 higher west of the Rocky Mountains).



Standby Generator

Wincharger Corp.'s standby AC generator gives farmers a source of electricity when power lines fail. The generator is designed to operate from a farm tractor.

Before connecting the standby generator, the farmer disconnects the power-line electricity. He then fastens a flat belt between the generator and the power take-off on his tractor. He runs the tractor at only about 60% of its normal operating speed. The generator has an outlet so the farmer can plug in a voltmeter to adjust speed to give the proper voltage.

Output of the generator is 115 v. or 230 v. at 60 cycles; capacity is 3,000 w. (when the tractor is working at 7 hp.). The tractor-operated shaft on the generator is V-belted to a countershaft that turns at 1,800 rpm.

- Source: Wincharger Corp., Sioux City 6, Iowa.
- Price: \$375.

Camouflaged Cooler

Barber-Colman Co. has an air-conditioning accessory, called Uni-Flo Square Ceiling Outlet, that makes cooling inconspicuous. When installed in a ceiling covered with acoustical tile, Uni-Flo blends with the ceiling pattern.

B-C says the unit can be set to discharge air in one, two, three, or four directions. For returning air from the air-conditioned space, B-C has an accessory identical to Uni-Flo.

- Source: Barber-Colman Co., 115 Loomis St., Rockford, Ill.

Theftproof Gas Cap

Defiance Mfg. Corp.'s Keyless Locking Gas Cap prevents thieves from siphoning out your gas. A metal grid on the cap end that fits deep inside the

gas pipe does the trick. Defiance says it would take a lot of pounding to knock out the grid.

To make the gas cap theftproof, Defiance has designed side springs and a ratchet mechanism, so that once the cap is screwed in it's almost impossible to remove.

Installation takes about 15 sec., according to Defiance, and the cap is supposed to fit all cars (except '41 to '50 Cadillacs) and trucks.

- Source: Defiance Mfg. Co., Inc., 1556 N. Wilcox Ave., Los Angeles 28.
- Price: \$2.75.

NEW PRODUCTS BRIEFS

Foundry sands can be tested for moisture with a unit made by Claud S. Gordon Co., 3000 S. Wallace St., Chicago 16. You balance a sample of the sand in a tray, dry it with a heat bulb, then balance again. A dial on the test unit shows the percent of moisture that was in the sand originally. The test takes from 2 min. to 5 min.

Breaking egg shells without breaking yolks is easy with Egg-Topper, a stainless steel gadget that lifts off half the shell. Manufacturer: Jepson Mfg. Co., Oakland, Calif.

Oscillograph images can be filmed—exposure to final print—in only 1 min. with a camera made by Allen B. DuMont Laboratories, Inc., Clifton, N. J.

An FM pocket-size radio, weighing 6 oz., is available from Micro-Electronic Products, Inc., 11 W. Fifth St., Peru, Ind. Price: \$37.50.

A Pyrex glass for inspection windows on furnace doors and absorption tanks is made by Swift Lubricator Co., Inc., Elmira, N. Y. It withstands varying temperatures, is highly transparent.

A brazing alloy, called Nicobraz, makes joints on stainless steel that are supposed to be as strong as the steel itself. It resists corrosion and oxidation. Made by Wall Colmonoy Corp., 19345 John R St., Detroit 3.

Talking to crowds? An amplifier-mike combination, made by Leslie Products Co., 12002 Lansing Ave., Leslie, Mich. will help. The amplifier, which weighs 12 lb. and is equipped with an 8-in. speaker, straps over your shoulder. The mike can be held in your hand. Price: \$159.50.

A handle from Laboratory Equipment Corp., St. Joseph, Mich., has an anti-twist device, so you can fasten it onto a door or cabinet with only one screw.

8% HIGHER OUTPUT FOR STEEL FABRICATOR

HERE are facts for the expansion-minded executives who seek high labor productivity as one factor in profit-making branch plant operation.

Production records of the mid-western, eastern and Metropolitan Oakland plants of a leading steel fabricator show:

- **Wages, incentives and working processes:** identical in all three plants.

- **Average output per man: 8% higher in the MOA plant.**

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*MOA stands for METROPOLITAN OAKLAND AREA, includes all Alameda County (pop. 733,999). Map spotlights San Leandro, one of many uncongested industrial areas. Its advantages to industry: wide variety of level sites in and out of city limits; large supply of skilled labor, and exceptional transportation; Freeway, fine highways; 2 mainline railroads, 3 minutes from Oakland airport.

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MARKETING



RICHARD S. RHEEM, president of Rheem Mfg. Co., is going to manufacture gas refrigerators. His entry is welcomed by . . .



W. PAUL JONES, president of Servel, Inc., who has been the only domestic manufacturer in the field. This is one case . . .

When Everybody Loves a Competitor

Rheem Mfg. Co. announced last week that it has just concluded a deal to produce a newly designed gas refrigerator. If all goes well, the company hopes to be on the market with it in about 18 months. This important piece of news in the home-appliance field spread joy three ways, inasmuch as:

- Rheem gets a chance to expand its present line of gas appliances and to move into a growing and lucrative market.

I. The Developer

There are, all told, some 70-odd makes of so-called absorption refrigerators throughout the world. But up to now, no other company has successfully competed with Servel in the domestic field.

• **Basic Patent**—All refrigerators work on the principle of producing cold by the expansion of compressed gas or vapor. Most types use mechanical compressors. In the absorption type, the gas is put under pressure by heating it. (You don't have to use illuminating gas as a heat source; Servel also uses kerosene.)

Crosley, Frigidaire, and other companies have tried to crack the field since

Servel got into it 25 years ago. But their efforts never panned out. Commonest explanation: They employed intermittent heating, and it is generally conceded that you must have continuous heat to be successful. W. Paul Jones, president of Servel, which long held basic patents on the continuous process, lays failure of other firms to lack of technical knowhow—"Servel has never refused to license anybody."

In 1943, a basic Servel patent covering continuous-absorption refrigeration expired. It was at this point that Clayton & Lambert, whose interest in gas refrigeration was a natural outgrowth of its line of gas water heaters, went seriously to work. By 1945, C&L had its prototype model; by 1949, it was

conducting field tests. Throughout, gas-utility interests gave C&L active support and encouragement.

• **Small Company**—But C&L was not in a position to capitalize on its success. Its vice-president, R. J. Miller, describes it as a "closely held smaller company." It figured that the financial burden of going into production would be too great. Also, though it straddles five markets (including pipe, builder's hardware, blowtorches, silos), C&L has had no experience with distribution in the refrigerator field.

The gas-utility people—anxious to get another company launched in refrigeration—chose a list of five likely candidates for the job of producing the new model. At least one of them turned

spraying paint with steam cuts time and costs



this revolutionary spray gun uses superheated steam in place of air to put on paint . . . thicker and quicker!

Steam spraying is a new spray-painting process developed and patented by du Pont. Through the use of dry superheated steam, finishing materials of higher viscosity can be applied in thicker films with one pass of the gun. Coatings are surprisingly free from the blemishes of sags, popping, or runs.

Steam spraying cuts finishing time. It produces finishes equal in quality to conventional finishes. It tremendously increases the productivity of existing equipment. It drastically reduces labor cost, as well as reducing the volume of

material, solvents and thinners normally required. It opens up new possibilities for industry in the reduction of finishing costs.

This Brake Shoe spray gun, specially developed for the process, realizes those possibilities by permitting not only reduced costs, but increased production. Steam spray equipment may be installed at moderate cost.

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the deal down on the theory that gas refrigerators are too expensive to make. Rheem, approached about four months ago on the deal, finally got the nod.

II. The Maker

For Rheem, the step is a natural. From its original interest in steel drums nearly 20 years ago, Rheem has been spreading into the consumer market with furnaces, water heaters, and most recently with forced-draught "Winter Air-Conditioners" (BW-Jul.3'48,p58). It had been thinking of stepping into the refrigerator field when the gas utility people suddenly opened the door.

• **Reasons**—Rheem wants to "get closer to the consumer," as vice-president Clifford V. Coons says, in anticipation of moving still deeper into the consumer market with still other products.

Currently more than half of Rheem's business is in appliances. This year net sales will hit more than \$70-million—about \$20-million better than last year and \$10-million better than 1947, Rheem's top postwar year.

• **Field Testing**—Rheem's first step in the refrigerator field will be production of 1,000 units for field testing.

Rheem is admittedly uncertain about plans for getting into mass production. Everything depends on the availability of steel and other materials a year and a half from now. Coons says that definite plans for plant expansion and tooling are "12 months off."

Meanwhile, Rheem will be establishing its name among consumers. It has been advertising its appliances for the past six years. Next year, it will widen its advertising schedules on behalf of its heating systems.

III. The Competition

As soon as the new refrigerator was announced, Servel stretched out a welcoming hand. President Jones announced: "We will welcome any good, substantial company that will come into the industry and help to develop the vast market for refrigerators."

• **Antitrust Suit**—Behind this lay, in part, the fact that the government's antitrustors have brought suit against Servel both on monopoly and price-fixing grounds (BW-Jul.1'50,p30). But there was another important reason for Servel's action: It feels just a little lonely in its present position.

Since Servel first acquired the U.S. rights to the Swedish Platen-Munters patents on absorption refrigeration a quarter of a century ago, its solitary position has been profitable, but it has also had its limitations. Jones put it this way last week:

"We have no apologies to make. As a trustee, so to speak, we have done our job. Today, we need support from



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Friction has some use,
but mostly it is
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F. H. Rockwell, General Freight Traffic Mgr.
Santa Fe System Lines, Chicago 4, Illinois

Santa Fe—all the way



some source. We need more advertising and sales effort to build the market."

- **Smaller Share**—The sales figures show what Jones means. Back in 1938, Servel's gas refrigerators had about 16% of the entire home-refrigeration market. This year, though Servel's sales have increased since 1938, gas refrigerators will account for only about 6%—about \$60-million—of the total.

In a technical sense, too, gas refrigerators have lacked the spur of competition. Jones admits that they have not kept pace with electrical types in the same respects. The makers of electric refrigerators have, for example, gone further in increasing interior size while reducing exterior size. They have also been able to offer a wider range of sizes. Jones says that his company now feels it has licked this problem. But it took years to do so.

- **All Alone**—Servel had to conquer single-handed problems that might have been solved faster had there been more companies in the field. Back in the 30's, it had to develop its own process of cold-shrinking in order to get enough of the right kind of small tubes it needed—at the right price. It had to develop automatic welding of joints to cut time and to produce a better product. It had to pioneer solutions to similar problems that interested almost no one but Servel.

- **Distribution**—There is also the problem of distribution. Nobody concerned with the field is quite happy with the distribution setup as it stands today.

While very nearly all gas ranges and water heaters are distributed and sold by independent distributors and dealers, about half of Servel's gas refrigerators are sold directly by gas-utility companies. Jones has complained on several public occasions that, though some utilities do a bang-up job in promoting gas refrigerators, too many are dragging their feet.

IV. The Sponsors

Gas-utility people have long wanted competition in gas refrigeration. Most of them will concur with the remark one executive of a major eastern utility made about Rheem's entry into the field: "We're delighted to see it."

- **Ups and Downs**—The utility people have a big stake in gas refrigeration. Always with them is the problem of the big peak loads they must carry in the winter, the deep valleys that trouble them in the summer. Worst of it is that these ups and downs get more pronounced as natural gas spreads to new areas and gas use surges upward.

The utilities feel that, with only one manufacturer, there has been a tendency to let the utilities carry the promotional ball. Competition, it figures, will start things humming for everyone.



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SODA POP, OF COURSE! . . . or maybe orange or sarsaparilla, or perhaps sparkling carbonated H₂O. In country stores, in big-league ball parks — Americans, young and old, are buying more soft drinks than ever before.

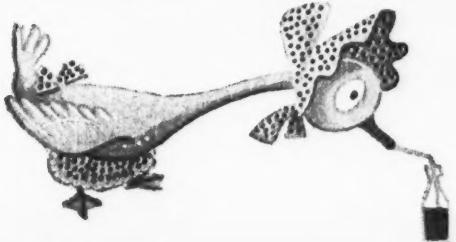
SOFT DRINKS

. by the bottle it's only small change, but in total a **BILLION-DOLLAR BUSINESS**, growing so fast that production doubled within a decade. Yet soft drinks is only one of the processing groups that make up the **\$33 BILLION FOOD PROCESSING INDUSTRY**.

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The Klixon Protector illustrated keeps motors in electrical appliances and other motor-driven equipment from overheating and burning out. Look for equipment with Klixon Protected motors for trouble-free motor operation.

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Gas Stations Are Going Super, Too

Service stations with forests of pumps are growing fast. They're cheaper to operate. Self-service feature is vanishing.

The same trend that revolutionized the retail grocery business in little more than a decade is now making itself felt in gasoline retailing. Super-stations made their debut on the West Coast in the form of self-service operations only a few years ago (BW-Jul.24'48, p68). Already they threaten to do for gasoline what the supermarket did for groceries.

A super-station is typically one sitting on a large plot with a frontage of 150 ft. or more and having anywhere from five to nine islands, usually running at right angles to the street. It usually has 15 or more pumps, all told. Most super-stations have extensive storage space for gas, low buildings out of the way at the rear. They are usually well-lighted and—in California—surrounded with a lot of hoopla. West Coast super-stations average more than 60,000 gal. a month—perhaps four times the average independent's business. Some big super-stations do better than 400,000 gal. a month.

• **"Basically Sound"**—The significance of the movement was underscored last week in Los Angeles, where the American Petroleum Institute met for its 30th annual meeting. In a talk on multipump reselling, as the super-station operation is called in the trade, B. E. Devere, president of Pathfinder Petroleum Co., made this flat statement:

"The degree of service or basic arrangement may be modified; but multipump installations, as such, will eventually dominate our marketing units. Why? Not because of price or self-service, but because, basically, they are sound."

• **Rapid Growth**—Devere sketched the rapid growth of the super service station. In December, 1947, there were five in operation around Los Angeles. Today there are an estimated 375 in the Far West handling a volume of some 23-million gal. a month. About 85% of these are in California, the remainder in Arizona, Nevada, and Washington.

But the super service station has also spread elsewhere. Devere estimates that there are about 30 stations in other parts of the country. (Super service stations were, in fact, one of the elements contributing to the recent gasoline price war in New Jersey.)

Devere observes that the early self-help operators have begun to modify their operations, adding TBA lines (tires, batteries, accessories), oil checking and changing, national brands of oil, and cutting down on the self-service feature. There are still a lot of Holly-

wood touches on the West Coast—klieg lights, give-aways, pretty girls on roller skates—but there is also more service.

• **Super-Conventional Merger**—Meanwhile, Devere notes, conventional service stations are becoming more like the super-stations in a physical sense:

"Primarily, greater emphasis is being placed on the gasoline pump by the installation of more islands and pumps. Whereas, in the past, the building dominated the location, today the tendency is to have the pumps dominate the location."

What Devere sees is a gradual merging of the two types of stations that will eventually do away with the current distinction between service and self-service. In much the same way the grocery supermarket was produced by a similar merger of the older grocery and the giant new self-service markets. Today the supermarket is essentially a very large store combining self-service with at least some degree of service at meat and vegetable counters.

Doing away with self-service would, of course, help spread the super-station farther afield. Now many local fire codes outlaw gasoline self-service.

• **Economy**—From a standpoint of economics, Devere thinks, the super-station is on firm ground. Construction costs run far less than for conventional stations. During the past three years, average cost per pump has been about \$2,000 to \$2,500 in super-stations as against \$5,000 to \$7,000 for conventional units of the double-wing canopy type popular since the war.

On other economic aspects, Devere is a little more reserved. He thinks that: "It is still too early to determine whether economies to be effected by multipump operation will lead to savings in price of significance to the consumer." But he adds: "It is certainly clear to all marketers that the ability to deliver maximum loads of products to a station results in substantial delivery costs."

• **Location**—Proper location of super-stations is still a problem, Devere thinks—particularly as far as rural areas are concerned. On the whole, he believes that multipump operation will prevail in areas where distribution costs can be lowered through direct delivery of bulk gas to retail outlets. But he has this warning: "The industry must use its good judgment in not diluting the market with these units to the point that they are rendered ineffective or impotent by sheer number. Otherwise, their greatest asset will be destroyed."

Used-Car Dealers Sell Each Others' Goods

If you can't beat 'em, join 'em. That's the old tactic that auto dealers along Detroit's Livernois Ave.—one of the country's biggest used-car sales rows—are using to fight the present slump in their highly competitive business. The dealers call their combine the Livernois Plan.

The plan, originated by used-car dealer A. J. Oster, calls for the 10 participating dealers to exchange lists of the used cars sitting on their lots. If a buyer walks into one lot and can't find the model, color, or style of car he wants, the dealer takes a look at the listings of his competitors. A quick call to the competitor's lot brings the car the buyer wants, and the first dealer sells it—he hopes. The dealer who sells a customer a competitor's car winds up with a small commission for his trouble—which is far better than no commission at all.

The dealers don't know yet how successful the plan will be. So they haven't cut their own sales efforts. They still try to sell a buyer anything on the lot. If he wants a Ford, they try to sell him a Lincoln. But dealers complain that some customers are just plain stubborn; if they can't get the car they want, they won't buy. The Livernois Plan is aimed at this kind of buyer. In the present languishing used-car market, plagued by Regulation W, dealers feel they can't afford to let even one potential customer get away.

Machine Selling Swells

Automatic merchandising is no longer "just around the corner"; it is here now. That's the gist of a progress report on robot selling made at the National Automatic Merchandising Assn. convention in Chicago last week. Delegates were told that:

- In 1949, candy sales through vending machines amounted to 3.6% of total wholesale candy-sales volume, or \$31.5-million worth.

- From 12% to 15% of total per pack cigarette sales are made through vending machines.

- Coca-Cola vending machines throughout the U.S. now total 440,000; there were only 290,000 of them in 1948.

- The trend in machines is not so much toward new gimmicks as toward refinement of present equipment. Biggest advances are in refrigerated machines for vending sandwiches, milk, and ice cream, and in machines that give complete luncheon service for plants that don't have a cafeteria.



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Drooping Spirits

Distillers ready thinner blends at higher prices in case of price controls. However, the plan may not work.

Usually a new brand of liquor hits the market with fanfare. But several brands of blended whiskey are making their debut quietly, almost secretly. They differ from present brands in two respects: They have less whiskey in them, and they cost more. They were announced only in the official list of fair-trade liquor prices in New York State. But the chances are the fancy-priced bottles will never reach your dealer's shelves.

According to the trade, leading distillers have created these brands in the hope that, if and when the Administration slaps on price controls, the new prices will slip by unnoticed.

• **Pay More, Get Less**—Distributors don't expect an immediate boom in sales. Since the new brands are officially listed, they must be available to anyone who wants to pay more for less. However, retailers would be hard put to push the sale. For example:

• Frankfort Distillers Corp., a subsidiary of Seagram's, has brought out Duffy's, Show Boat, Old Oscar Pepper, and Mattingly & Moore—blends of 25% whiskey and 75% neutral spirits, all priced at \$7.37 a fifth. It's also introducing Antique and Old Baker, with the same formula, at \$7.57. Currently, the company's standard brand, Hunter (35% whiskey blend), retails at \$4.05.

• Calvert Distillers Corp., another Seagram subsidiary, has Old Drum and Silver Dollar (28% whiskey), for \$7.21. Calvert Reserve (35% whiskey) now sells for \$4.05.

• Schenley's Melrose Distillers, Inc., is also looking to the future. Its new brands, Diamond Wedding, Old Diamond Wedding, and Finch's Diamond Wedding (all 35% whiskey), are priced at \$7.29. Its standard brand, Golden Wedding (35% whiskey), retails at \$3.65.

• Publicker's Continental Distilling Sales Co.'s New Philadelphia Superior Vat (20% whiskey) at \$5.89 will compete with its Philadelphia (35% whiskey), selling at \$3.99.

• **Dim View**—This wishful thinking on the part of the distillers seems doomed. Chairman Symington of National Security Resources Board and Economic Stabilization Administrator Valentine have promised to investigate any price jumps made in anticipation of price controls. They will demand a cost-increase showing or a cutback to previous price levels.



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At Christmas, an 8 to 10 lb. golden-brown Forst Smoked Turkey.



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In July, six half-pound cans—2 ea. of vacuum-packed Sliced Smoked Turkey, zesty Smoked Turkey Pate, multi-useful Handi-Cut Smoked Turkey.



Finally, Fall brings a generous 4 lb. package of spicy smoked pork sausage and a whole 8 to 10 lb. side of luscious Catskill Mountain Bacon.

The \$32.50 membership includes Christmas Turkey, in March—a Forst Party Pak (taste-tempting Forst special recipe salami and braunschweiger (liverwurst)). July— one 8 oz. can, each of Sliced, Handi-Cut and Pate Smoked Turkey. Oct.—4 lb. Ctn. Smoked Pork Sausage.

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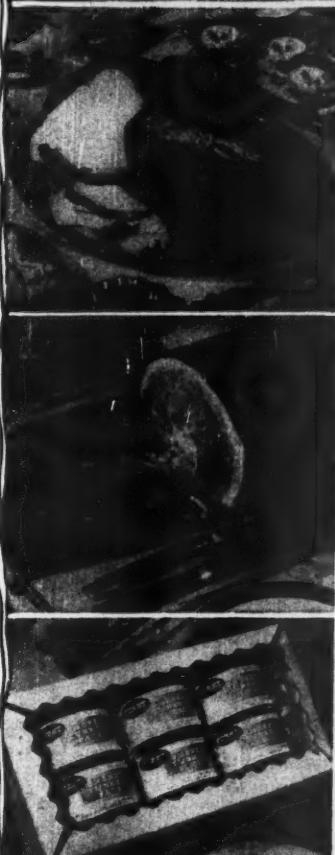
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Forst Smoked Turkey For Festive Holiday Feasting

To see these magnificently golden-brown birds is to whet the appetite... to partake of their succulent goodness is a taste-thrill long remembered! Choice, young, full-breasted birds are cured in rare, zesty spices and aromatic herbs, then slowly smoked over fragrant applewood embers. Whole smoked turkeys from 8 to 20 lbs., net wt. Price \$1.65 per pound.

Forst Smoked Ham — The Most Delectable of All Hams

Tender, succulent, with a flavor rich tantalizing delicious! Selected from the finest corn fed Western hogs... each ham is sugar-cured and smoked Southern style over fragrant glowing hickory embers. Net wt. from 10 to 16 lbs. Price \$1.40 per pound. Ready to serve.

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Read at left about the Exclusive Forst "Delicacy of the Season" Club... a year 'round reminder of your thoughtfulness and best wishes. Ideal for group giving... for industrial or business contacts... this is a unique and regal gift that offers a taste-thrill for every season of the year.

Forst Bank everywhere tell us what a hit the "Delicacy of the Season" Club makes with friends and business acquaintances.

Solve your Christmas gift shopping problems the easy, "excitingly different" way with sure-to-delight smoked delicacies from the Forst Catskill Mountain Smokehouse. Make up your list... and mail to us with your check. We'll do the rest.

**NOTICE: Special quantity discounts for
orders of 25 or more. Write for details.**

THE FORSTS

Route 230

Kingston, N. Y.



THE FORSTS, Route 230, Kingston, N. Y.

Smoked Turkeys

(8 to 20) lbs. at \$1.65 lb. \$.....

Ready-to-Serve Ham

(10 to 16) lbs. at \$1.40 lb. \$.....

Smoked Turkey in cans,

4 of ea. (12-½-lb. cans) at \$16.00 \$.....

(6-½-lb. cans) at \$8.50 \$.....

(3-½-lb. cans) at \$4.75 \$.....

I enclose Gift List and check for
Smoked Delicacies checked at left,
delivery charges prepaid.

Approx. date required.....

Send information regarding
quantity order discounts.

Your Name.....

Address.....

City..... Zone..... State.....

NOTE: We attempt to fill your orders as closely as possible,
but it may be slightly under or over weight specified.

IMPORTANT: All Forst Catskill
Mountain Products are
Government Inspected.

MARKETING BRIEFS

Gulf's first step to expand in the Midwest will bring it into the Chicago market. Hartigan Oil, local marketer, will distribute Gulf products through its chain of stations. Up to now, Gulf has concentrated its business in the South and East.

Costs are down for Julius Wile Sons & Co., Inc., Teterboro (N. J.) liquor importer. Wile credits a new plant, where importing, distributing, wholesaling, and rectifying operations are all carried on under one roof.

Ranch-style prefab houses will be offered by Gunnison Homes, U. S. Steel's prefab subsidiary. The homes, priced in the \$7,000-\$10,000 bracket will come in five sizes.

A libel suit was filed by Bob Hope against radio columnist John Crosby and Life magazine. Hope charges a Crosby article in Life libeled him by saying he stole gags from Fred Allen.

"Giant retailing" exposes manufacturers private brands to danger, E. B. Weiss, Gray Advertising, told the American Fair Trade Council. If it weren't for fair trade, he said, big retailers would put an end to manufacturer's advertised brands.

Rexall is back in the black. The drug-store chain, which lost \$1.2-million last year (BW-Sep. 23'50,p57), wound up the first nine months of 1950 with a \$655,522 profit.

Its biggest promotion ever is planned for Westinghouse appliances in 1951.

Soap sales in the third quarter were 32% ahead of the previous three months. The nine-month total is 6.4% ahead of last year. Detergent sales in July-September were 16% ahead of the second quarter.

Munsingwear and Vassar Co. (foundation garments) will merge through an exchange of stock. Vassar becomes a division of Munsingwear, but will continue to sell through its own sales organization.

Auto dealers are so mad at the terms of Regulation W that one group in Los Angeles has filed suit against the board of governors of the Federal Reserve. It wants a preliminary injunction against enforcement of the curbs.



Reduces Cost of Many Jobs

SAVES TIME • Manpower • Equipment

The new Holmes-Owen Truck Loader offers a workable solution to the problem of increasing cost. This driver-operated unit substantially reduces the cost on many of today's operations because it converts the average dump-truck into an independent working unit. It saves time, labor and equipment by permitting the driver to pick up his own load, haul and unload; do light digging, grading and handle numerous salvage and cleaning up operations. See your dealer or write factory today.

Manufactured by

ERNEST HOLMES CO. Chattanooga, Tenn.



DRIVER controls digging and loading operation from cab.



ONE-MAN operation speeds-up LOADING, HAULING and UNLOADING.



A TYPICAL REMINGTON RAND PUNCHED-CARD INSTALLATION

**These machines save us \$4,166 every month...
and they don't cost a dime!**

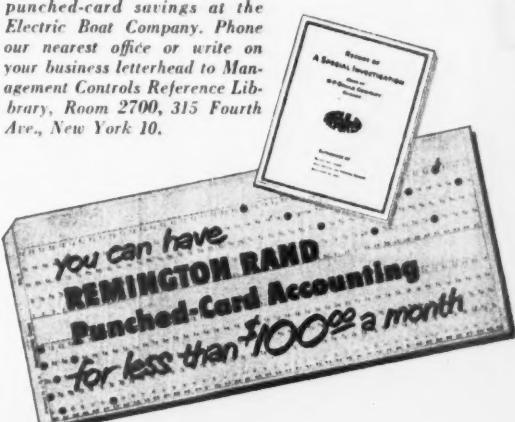
"These punched-card machines not only save their own rental cost but pay us a monthly profit of \$4,166 besides!"

That's the actual experience of the Electric Boat Company, famous submarine builders of Groton, Connecticut. Back in '40 they switched from manually operated calculating machines for payroll and cost compilation to Remington Rand Punched-Card Machines . . . and made an immediate saving. By '43, with greatly expanded production and payroll, punched cards were saving them the equivalent of *sixty* full time clerks!

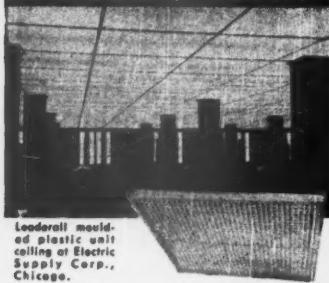
No wonder Electric Boat has been quick to utilize the miraculous speed and accuracy of punched-card accounting for still more jobs year after year. Machine loads, for instance, machine efficiency reports, materials and production control, and estimating submarine reconversion costs.

You, too, can save by letting low cost punched-card methods absorb part of your high cost clerical work. You can *rent or buy* complete equipment from Remington Rand . . . or you can turn over any part or all of the job to Remington Rand Punched-Card Record Services for economical processing.

FREE to interested executives . . .
Gould Report No. 4713-A, an impartial authority's study of punched-card savings at the Electric Boat Company. Phone our nearest office or write on your business letterhead to Management Controls Reference Library, Room 2700, 315 Fourth Ave., New York 10.



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Leaderall moulded plastic units
Supply Corp.,
Chicago.

LEADERALL Illuminated Ceilings ... Modernize, Beautify

... spread a soft glow of even light from wall to wall. They simplify decorative planning two ways: add a cool, quiet modern note to the completed decorative scheme . . . cut remodeling costs by permitting old ceilings to be used without change!

Leaderall moulded plastic units are hung, section by section, on adjustable tie rods at any desired distance from present ceilings. Light source is simple fluorescent strip with reflectors. They give an absolutely even ceiling, with all structural remodeling costs avoided.

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and Complete Leader Catalog

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Leader Electric-Western: 800-100th Ave., Oakland 3, Cal.
Campbell-Leader, Ltd.: Brantford, Ontario, Can.

SAVES 84%!

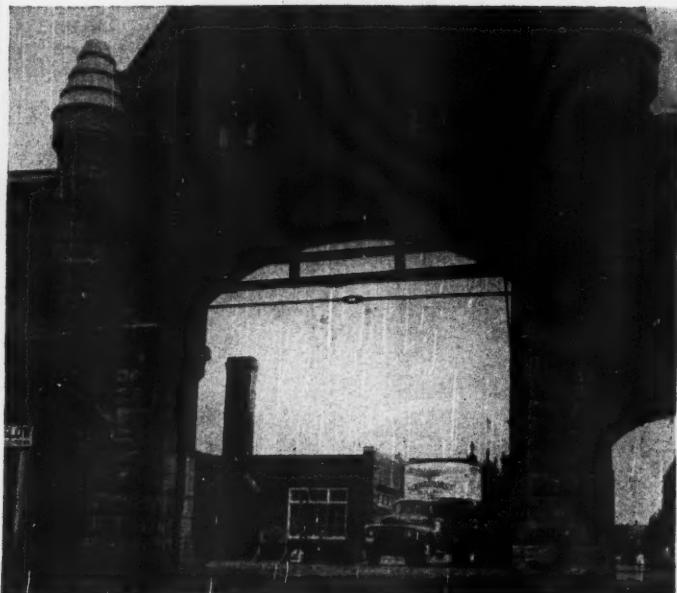
FOR AUTOMOTIVE SPECIALTIES MANUFACTURER

Buschman roller gravity conveyor feeds 227 Kegs from truck to the floor-to-floor belt conveyor. Instead of 32 hours, the job is done in 5.2 hours and the freight elevator formerly tied up for two hours is free for other traffic.

Without cost or obligation, Buschman Representatives will survey your operations and point out possible savings. Write today for complete catalog.

Buschman
Conveyors

FOOD



NO IVY COLLEGE lies within this Gothic gate. It's the main entrance to Chicago's stockyards, world's largest transient hotel for food on the hoof.



PACKING-COMPANY BUYER prods steers in stockyard pen. Commission man, representing the farmer, handles the sales, entirely by verbal dickering.

Chicago Stockyards Primp

Once, the Chicago stockyards thought they were being pretty nice to let farmers and packers use their huge transient hotel for livestock. The customer—two-legged or four-legged—got in pretty much on sufferance. If the pens happened to be dirty, what could you expect?

Then business began to fall off. In the mid-20's, the yards handled up to 18-

million head of livestock a year; in 1949, the figure was down to 6-million. More and more farmers were selling direct to the packers instead of shipping to Chicago for sale.

• **Modernize**—Then came a big change. The stockyards began to modernize, clean up, drum up trade. Today, the pens and runways are as clean as the uninhibited guests permit. And the sell-



THE LAST MILE. Morose-looking cattle, as if aware of doom, trudge up long ramp that leads from the stockyards to a nearby slaughterhouse.

to Pep Up Waning Business

ing drive is now beginning to pay off.

Just one feature of the sales drive will draw 200,000 farmers to the stockyards next week. That's the opening of the International Livestock Exposition. The show itself is 51 years old, but the hoopla for the stockyards is new.

• 4-H Clubs—About 40 states and several Canadian provinces send entries,

some 10,000 of them. A lot of the prize-seeking cattle, sheep, and hogs will have been groomed and fattened by boys and girls of the 4-H clubs. Some 1,400 members of this rural youth organization will be holding their own annual meeting along with the exposition.

Incidentally, last year the grand champion steer was a 4-H product. It

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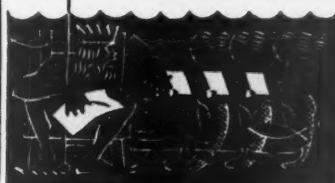
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The quality, crispness
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NEW LOOK in stockyards features cleaner quarters for "guests." It makes them hungrier, hence they put on more weight. Nonskid floors are flushed down frequently.

sold for \$11.50 a lb., enriching the Pecos County (Tex.) 4-H club by a neat \$13,800.

• **New Boss**—The exposition is just a part of the drive to make the stockyards popular with farmers—and popular with their platter-bound produce. Big wheel in the drive is William W. (Billy) Prince, a dapper product of Princeton, the Army, and the First National Bank of Chicago. Two years ago, Billy Prince became operating head of the complex interests that were founded half a century before by his cousin, Frederick H. Prince.

Revitalizing the waning stockyard business became Project No. 1 for the new boss. The yards were still the world's most important livestock market, but they were fading all too fast. Here's the setup of the stockyards, and here's what Billy Prince did to change it.

• **Public Market**—The stockyards are basically a public market, plus a hotel for the livestock while it's waiting to be sold and taken to the slaughterhouse. In the old days, when drovers brought their herds to Chicago, man and beast put up at the same hotel, with the critters penned in the backyard. This arrangement had some disadvantages for the human hotel guests. Finally, the animals got their own quarters, the stockyards.

The yards don't own any animals. They merely provide shelter and feed—for a fee—while the farmer sells his herd to a packing house, through the services of a middleman. There are 250 of these commission men, all members of the Livestock Exchange, and all subject to rules, both federal and

their own. One rule limits them to 63 days a year out in the country drumming up consignments.

• **Decline**—Business for the commission men, and the stockyards, began to decline in the 20's when packing companies built plants in Iowa to be near the big hog supply. The packers say this reduced the flow of hogs to Chicago; so they began sending their own buyers into Illinois and Indiana to buy direct from the farmers or at local auctions.

This direct marketing appealed to the farmers for several reasons. They knew the price they'd get in advance. They didn't have to pay for feed, yardage, and commissions. Their own cooperatives and experts at some agricultural colleges urged them to sell directly. Local buyers, on the spot, urged the joys of dealing with them. Meanwhile, the commission men stayed largely in Chicago, and the stockyard itself said little.

These influences showed marked results. From 1925 to the present, direct marketing of cattle jumped from 12% to 25%; calves from 14% to 43%; hogs from 26% to 60%; sheep and lambs from 15% to 40%.

• **Will It Work?**—That's the trend that Billy Prince set out to stop. Whether he can succeed is strictly an open question. But his enthusiastic aides point gleefully to these facts. Animals going through the yards are up slightly over a year ago. Chicago's stockyard showed the biggest gain in hogs of any major market. And it was the only market to show a gain in cattle in October, compared to a year ago.

Prince is attacking the problem on

Dust

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THOUSANDS OF DOLLARS A DAY!
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... will prove a sound investment. Boosts plant
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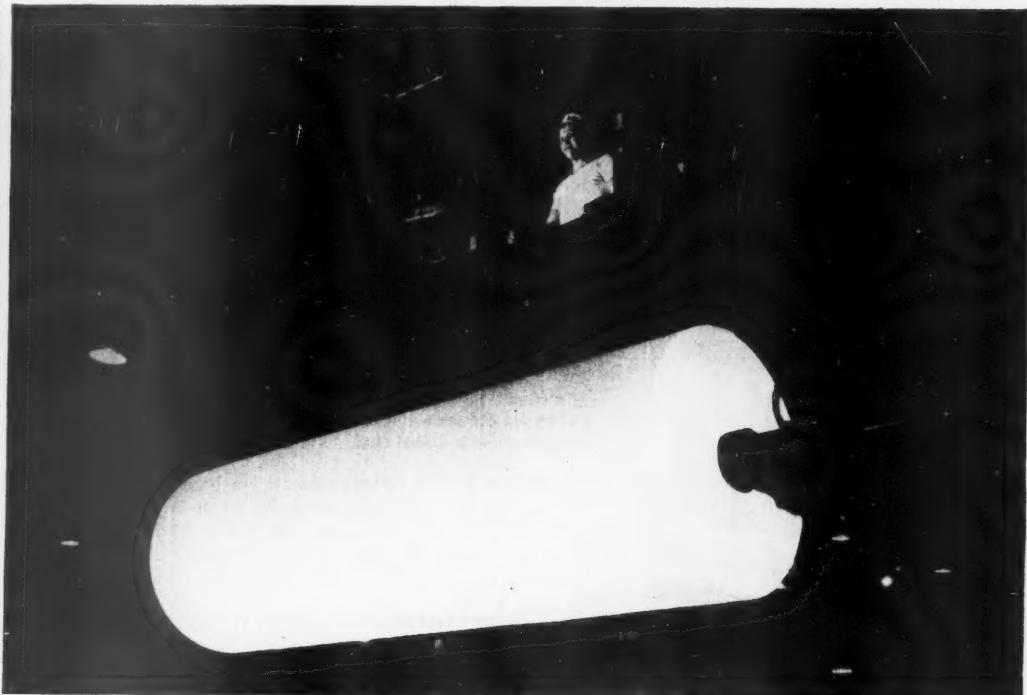


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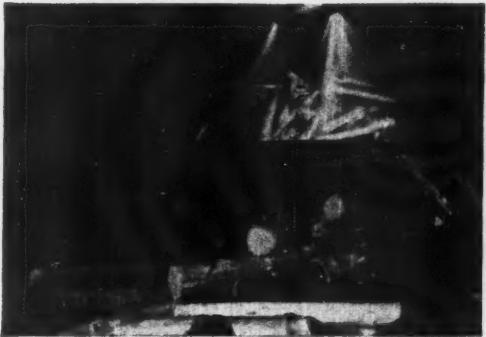
For finest offset printing. Lithofect provides a moisture- and pick-resistant coating. Offers outstanding foldability. Renders colors without loss of density.

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An economy sheet for volume printing. Now Multifect has added strength, better foldability, greater uniformity ream-on-ream than ever before.



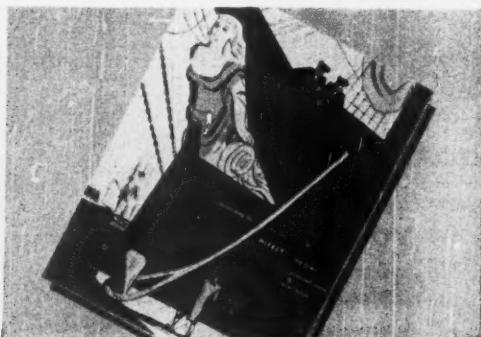
QUICK DEATH FOR BARK! In huge 45-foot-long rotating steel drums, logs are stripped of bark as they pound and rub together. Removal of all such undesirable materials makes possible a far whiter, cleaner sheet. And for unbelievable body strength and resiliency, LongLac fibers are now included in the manufacture of all four new Kimberly-Clark papers.



"FACE POWDER" FOR A PAPER'S "COMPLEXION." As an aid in imparting the proper surface to all four Kimberly-Clark papers, only soft, white clay of face-powder texture is used in the coating formulation. And now, a more delicate balance of all coating ingredients gives this paper the smoothest, whitest printing surface in Kimberly-Clark history.



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SEEING IS BELIEVING. Now you can buy with confidence, print with confidence, for Kimberly-Clark paper is tested on actual printing jobs before it reaches the market. Reprints of these tests, available to you, tell far more convincingly than a thousand words how your purchase will perform. It's *proof before you buy* that Kimberly-Clark gives you the printability of *higher-priced paper*!

Now you can make every impression a far better impression—without an increase in printing cost! For Kimberly-Clark paper gives you the press performance and reproduction of *higher-priced grades*!

The secret is the new longer, stronger LongLac sulphate fiber—and Kimberly-Clark's own newly perfected white clay coating formulation. You'll see new whiteness and brightness, feel new smoothness, in all four Kimberly-Clark coated papers. In make-ready, on large or small presses, you'll discover new economy and dependability. Finally, in comparing reproduction with that of any other paper, at any price, you'll agree there's a striking new difference in the quality of printing achieved—with less waste.

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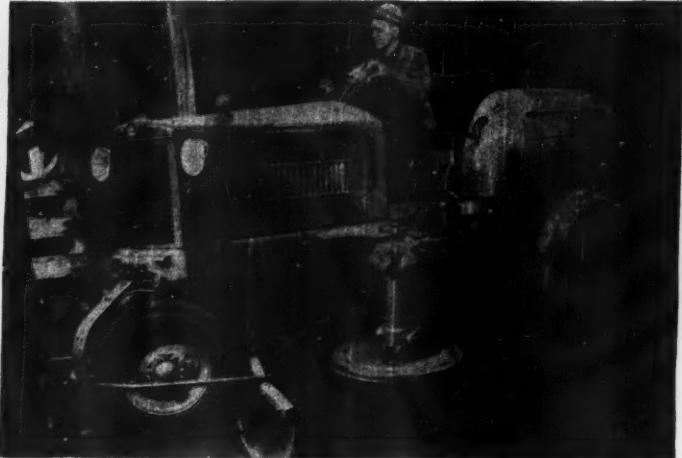
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Looking for automatic regulating valves, standard or special? Let Klipfel "know-how" work for you. Our engineers are valve men of long experience, but also receptive to your ideas. Our plant is close-knit and fast-moving, with unusual facilities.

Illustrated is a Klipfel Thermostatic Valve, one of many described in Bulletin BW, 449. Ask for your copy.

Klipfel VALVES INC.
DIVISION OF
HAMILTON-THOMAS CORP.
HAMILTON, OHIO



MOTORIZED BROOM patrols the aisles of the hog pens. It's all part of campaign to bolster the stockyards' waning position in the livestock business.



THE BOSS W. W. Prince is mainspring of drive to refurbish stockyards.

many fronts. Most visible is the cleaning up of the yards themselves, making them more attractive for man and beast alike. The solicitude for how the animals feel about it is practical. Housed in clean pens, the critters get hungrier. Eating more, they get fatter. When they are fatter, they bring better prices.

• **Weight Loss**—The farmers used to take a dim view of the way their produce lost weight on the trip from farm to scales. The new cheery-chow-for-contented-cattle program has gone a long way toward curing that. Hogs have gained as much as 8 lb. during only a six-hour stay in the stockyards. Some droves have actually shown a net gain over their weight when they left the farm.

Cleaning up the yards came first. Even at its best, a stockyard is a slushy, mucky place. But Prince is determined that his yard will be the best. He has 14 power scrapers and

motorized brooms constantly removing straw and manure.

• **No Kicking**—The doom-bound animals get other breaks now. Stock-handlers lean to prods and canes for hustling stock around. Now they must use canvas flaps. There's even a sign in the hog building: "If you've got to kick 'em, take off your shoes."

Prodding and kicking used to be a factor in bruises; and bruises slice \$50-million a year off the value of U.S. livestock. The Chicago yard is running a bruise-reduction contest for the 2,100 firms and individuals who truck livestock to the yards.

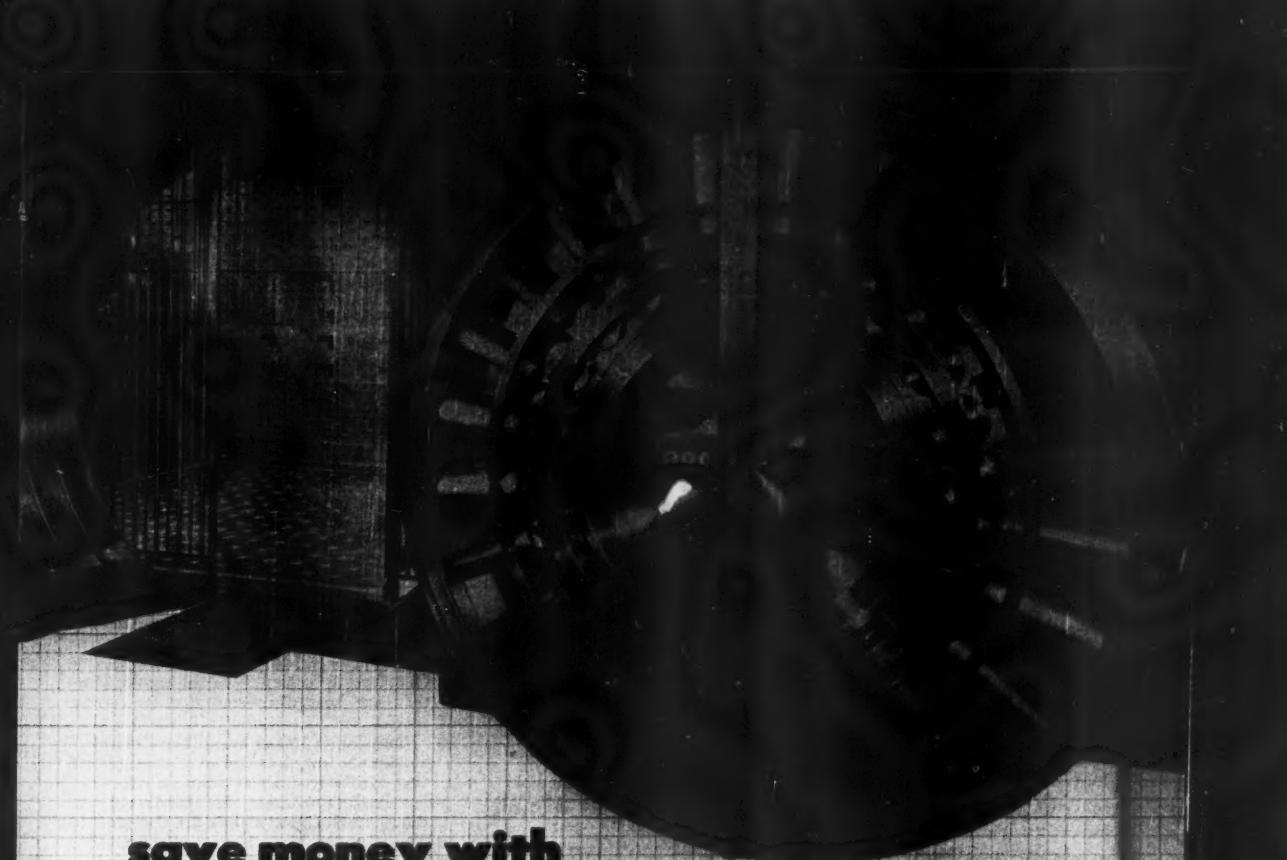
Another goal is to reduce the number of "deads" and "crips." Every year enough livestock die or are crippled in transit to supply a city the size of Indianapolis.

• **Propaganda**—The object, of course, is to convince the farmers that the stockyards are the best place to market their livestock. That's being done by propaganda, as well as by improving conditions.

The Chicago stockyard has hired the J. Walter Thompson agency to handle the propaganda. A weekly market report is mailed to 14,000 farmers, educators, newspaper editors, and broadcasters. A movie showing how the stockyards operate is booked a year in advance for farm meetings and farm-area high schools.

• **Better Price**—The big emphasis in the selling campaign is on the idea that the farmer can get a better price for his livestock by using the specialized services of the commission man. There's open trading with many buyers in the yards, and the specialized agent is the man who can get the best price.

Improvements in service are also



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TORRINGTON NEEDLE BEARINGS

You can save in first cost—Needle Bearings are only slightly more expensive than plain bearings and cost much less than conventional ball or roller bearings.

You can save in design—only three elements are needed, a plain-bore housing, a hardened and ground shaft and the Needle Bearing.

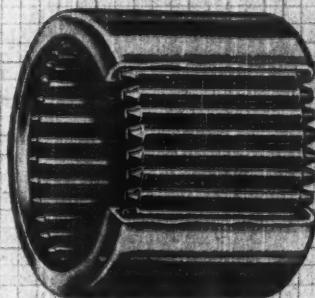
You can save in machining—housings are straight-through without shoulders or grooves.

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Secure these savings now by asking a Torrington engineer to help you adapt anti-friction Needle Bearings to your products.

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meet the boss...

We Have a Problem...

You see, our glassine and greaseproof papers package hundreds of nationally known food products which are enjoyed daily in millions of American households. Thus our employees make paper for many products which they themselves buy. They are ultimately *their own customers*.

But All Too Often

our employees view our production as little more than a sort of bulk commodity. They see only a vast amount of paper being loaded for shipment—unappreciative of its destination and end use.



We Hit Upon a Plan to give our men a keener awareness of the CUSTOMER whom we regard as our True Boss. Here's the plot: Every two weeks on payday our entire crew "meets" a customer. A simply written, straight talking, printed brochure describes one customer's machines and operations. It makes complaints understandable by explaining in



clear detail just what mechanical headaches the customer may suffer through defective workmanship and how the smallest negligence in service can upset his schedules (paving the way for competition). The customer emerges as a human being with problems and worries (yes, and perhaps ulcers), whose demands for quality and service are reasonable, indeed, when you put yourself in his shoes. The program is highlighted by giving each employee a sample of the customer's product. Thus he sees in actual use paper he helped to make. He feels a little pride in this tangible evidence of his *own work—well done*.

It's a Big Success. In operation now for only 16 weeks—but going strong—this plan is already inspir-



ing our men to make that good Rhinelander paper even better than ever, with benefits to us all—worker and customer alike.

If this plan interests you, we will be happy to tell you more about it.



stressed. For instance, things are being speeded up. In the old days, a trucker might have to wait five or six hours to unload on a peak Sunday night. Now there are new loading docks, no waiting.

The animals themselves have helped the speedup. Someone discovered that the beasts preferred climbing up stairs to following a sloping ramp. Hogs, cattle, and sheep now clamber cheerfully up steps where formerly they had to be herded along the ramps. And this has brought about a big reduction in bruises, too.

• **Metal Mangers**—Back in 1934, an \$8-million fire destroyed most of the 13,000 wooden pens in the yards. So the management is turning to metal. Stainless steel, aluminum, wire all got tryouts; now dipped steel bars are selected for further testing. Fourteen of the new pens are in operation, complete with steel mangers and water troughs.

New floorings are being tested in the quest for longer wear and fewer bruises. One flooring seemed to be the answer—the hogs discovered that it was good to eat.

Speaking of things to eat, there's the Stockyards Inn, operated as a convenience for farmers. Its new Sirloin Room has beef so luscious that fashionable diners from Chicago flock to the inn. You can pick your own steak from a mound of ice; a hot brand marks it for you.

• **Compost Plant**—Another sideline inside the yards is the Frazier Illinois Compost Co. Joseph W. Frazier has evolved a new method for turning straw and manure into compost in a week, instead of the year that nature takes. Prince hopes the method will provide a handy and profitable way to dispose of the yard's principal byproduct. He also hopes to develop it so that every livestock producer can use it on his own farm. Hence, more goodwill for the stockyards.

One pleased packer summed up the Prince program in these words: "It's like any other service business. You give better service, and your business will improve."

That's a long way from the time when old Frederick H. Prince—he's 92 now—bought the stockyards primarily because he wanted the little Chicago Junction Ry., which serves it.

The elder Prince saw the value of the Chicago Junction as a link between eastern and western lines. Along its tracks, he bought the 1,500 acres known as the Central Manufacturing District. The Prince interests make their own electricity, under the misfit name of Produce Terminal Co. During the depression, a livestock bank came into the family fold, when Frederick H. bailed it out of trouble.

DEFENSE BUSINESS

Civilian Bite

Allocations of materials for essential nonmilitary uses begin to add up. Ore boats are latest certified program.

Allocations of scarce materials for essential civilian uses already are beginning to add up. And there are a lot more on the way.

National Production Authority tried its first allocation order late last month, reserving 310,000 tons of steel a month for railroad freight car construction and maintenance during the first three months of 1951. This week it set aside 10,000 tons a month for Great Lakes shipping, chiefly ore carriers. And it was readying allocations of both steel and other scarce metals for electric power, petroleum, and some other industries.

• **Ore Boats**—The allocation for Lakes boats was patterned closely after the freight car allotment. It earmarks sufficient steel during January, February, and March for 12 cargo vessels—nine ore carriers, two freight car ferries, and a limestone carrier.

Defense Transport Administration will issue certificates for the necessary steel for each. DTA also arranged for the freight car allocation and was named to handle that program. NPA agreed to line up the necessary production of steel components. As in the freight car program, certified steel orders for Lakes shipping will not excuse any producer from turning out his quota of rated (DO) orders.

The new shipping capacity will permit the handling of an additional 7-million tons of iron ore annually from the Lakes fields. It will ease, but not eliminate, one of the sorest problems of the steel industry.

• **Power's Cut**—Aluminum will be the first material allocated to the power industry. NPA's cutback on civilian use of aluminum (BW-Nov. 18'50,p.34) took account of the need for such a program. While cutting back other uses 35%, it permitted electric utilities to take delivery until Apr. 1 of all orders for aluminum transmission cable, wire, and bus bars placed before Nov. 13. This will give NPA time to check over the industry's aluminum requirements with the Interior Department, which is getting reports from the utilities. Interior will have its figures ready by Feb. 1, and you can look for an aluminum allocation for power shortly thereafter.

Copper for power will be another

Better Rubber Products are made with Du Pont Neoprene



ALWAYS ON HAND FOR TOUCHY JOBS

Work gloves made of long-lasting neoprene protect the hands against hazards in the plant or home

Whether work gloves are to be worn for handling hot metal, tending acid baths, or just washing dishes, they must provide protection, comfort and durability. To meet such service conditions, they must resist oils, greases, heat, chemicals . . . cutting and tearing. That is why leading rubber glove manufacturers now make their top-quality lines of neoprene, Du Pont's chemical rubber.

These better gloves are tailor-made for specific needs. Lightweight latex for dexterity . . . heavy duty impregnated asbestos for maximum protection . . . coated and fabric lined with curved fingers for comfort.

Gloves are just one item among scores of resilient products improved

by neoprene. Its unusual properties provide plus values for articles requiring resistance to oils, greases, heat, many chemicals and abrasion. In addition, neoprene possesses excellent aging and flame-retardant properties.

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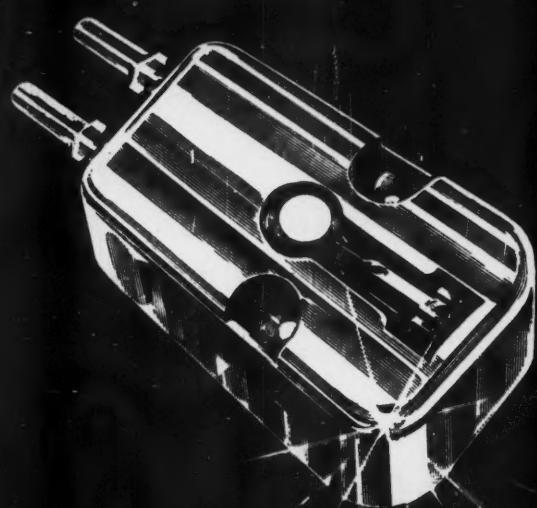
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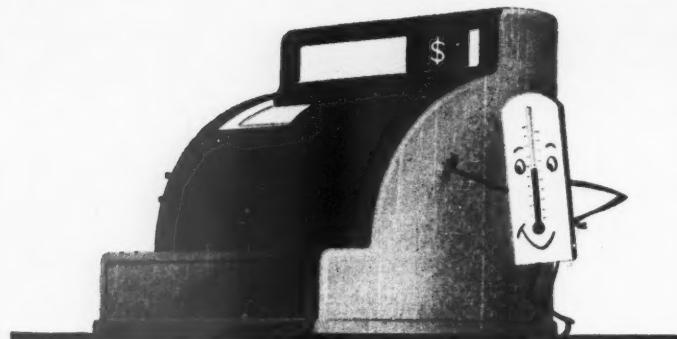
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Only a cash register loses weight for lack of exercise. Looking now to next summer, will your cash register suffer from lack of business—because you're not air-conditioned?

Now is the time to insure next summer's profits by installing air conditioning. Your Worthington distributor can give you an attractive price.

Follow the Lead of the Largest

Selected for such large installations as J.C. Penney stores, Quebec House Apartments in Washington, Burlington Mills in North Carolina—

Worthington also makes small "package" units for small shops, eating places and offices.

Worthington users say Worthington equipment works best because it's all made . . . not just assembled . . . by Worthington.*

And Worthington's over-50-year experience in air conditioning and refrigeration is balanced by your local distributor's engineering experience. (See Classified Telephone Directory.) Worthington Pump and Machinery Corporation, Air Conditioning and Refrigeration Division, Harrison, New Jersey.

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*Worthington makes more of the vital components—compressors, condensers, engines, turbines, pumps—for completely engineered systems or unit conditioners than any other manufacturer.

early allocation program. But before anything else, NPA will cut back on civilian use of copper. It has an order in the works now.

- **Oil Industry**—Interior also will handle the allocation of steel for the petroleum industry. It got set for the job this week when its Petroleum Administration for Defense came to terms with NPA on how allocations would be administered.

The PAD-NPA agreement closely follows the pattern set in World War II, when the War Production Board reconciled the demands of wartime claimant agencies.

PAD will handle the claims of all parts of the domestic petroleum industry, including natural gas. It will review materials requirements, take them to NPA, then split up the total allocation of materials allowed for petroleum. It will do the same job for industries that primarily produce equipment and materials—like pipe and compressors—for the oil and gas industries.

- **Transport**—Defense Transport Administration is doing much the same thing for the freight car and ore carrier builders. So far, however, it has been operating on a less ambitious scale than Interior has in mind. When the time comes for allocations to the entire transportation industry, DTA will have a more comprehensive job of gathering statistics and administering allocations.

Easier Curb

New regulations on multi-family housing won't be so tough as the restrictions on single-family homes.

The Federal Reserve Board got the toughness out of its system with its Regulation X restricting credit for single-family home sales. It is now drafting new regulations on multifamily housing. But they will be mild in comparison. In fact, they won't be much tighter than the requirements now in effect for Federal Housing Administration-insured mortgages on rental properties.

Regulation X did not apply to multifamily construction. (BW-Oct. 14 '50, p34). So far, that has been covered only by the FHA's own rules, which were stiffened up last summer.

- **Down Payment**—As things look now, the new rental-housing regulation will probably require a down payment (equity investment) of 20% or slightly more.

Present FHA requirements permit a limited-dividend corporation to get a mortgage on 80% of that portion of the value of a rental project that doesn't exceed \$7,000 per family unit. FRB

won't tighten the requirements for conventionally financed apartment projects much beyond that.

There are two reasons for dealing gently with rental housing: (1) Both FRB and the Housing & Home Finance Agency want to maintain the volume of rental construction during the period of partial mobilization; (2) the two agencies agree that the restrictions must be written to encourage future rental-project planning. Plans for 1952 projects must be under way soon.

The real problem facing FRB and HHFA Administrator Raymond M. Foley is to work out a valuation basis for conventionally financed rental properties—one that won't put too big a burden on lending institutions and builders.

• **Credit Curbs**—On commercial construction, FRB has not given up completely on the possibility of using credit curbs. But none of the approaches so far suggested makes much sense. It isn't even going to try credit controls on industrial construction.

The Watchdog Growls

Government mobilization agencies are getting a taste of the workings of this emergency's watchdog committee. And it's tough to swallow.

This week's report of Sen. Johnson's preparedness subcommittee throws around some mean language. It talks of "siesta philosophy" in the surplus-property program and the Munitions Board. It says the President, or a congressional committee, shouldn't have to "baby sit" the mobilization.

Specifically, the Johnson committee criticizes the National Production Authority for installing stiff cutbacks on rubber consumption, then handing out "hardship" relief amounting to 15,000 long tons more than the quota. It hits at the General Services Administration and the Munitions Board for selling a government alcohol plant at Kansas City, Mo., without a national defense clause that would allow the government to take the plant back. It chides the Air Force for selling F-47 airplane engines.

The committee stressed that foresight was what's needed. Buy natural rubber from the Far East now, at premium prices, it urged, lest we lose this source to communism. And take a second look at guayule as a source of natural rubber.

The mobilizers have another blow coming next month, when the committee reports on steel capacity. The report, prepared by Don Cock, vice-chairman of the Securities & Exchange Commission, will say that at least another 10-million tons of capacity are needed—over and above the 9-million-plus the industry has already projected.

How to keep 25,000 volts on the right path!



Harman & Collins 8R-101 Magneto is primarily designed for Ford V-8 engines used for racing and industrial power. Plaskon Alkyd rotor-sleeves and insulators used in this application are molded by Prisk Plastic Molding, Alhambra, California.

another example of how
PLASKON ALKYD
improves the performance
of electrical equipment

It takes a plastic with high dielectric strength, high arc resistance and high dimensional stability to harness and keep a 25,000 volt output "on the right path". That's why Harman & Collins chose Plaskon Alkyd for insulators and rotors in its 8R-101 Magneto! Harman & Collins reports that "ordinary plastic materials previously tried were completely inadequate for this application."

Plaskon Alkyd thermosetting plastic molding compound not only possesses unusual electrical and mechanical properties which provide better performance in finishing products. It can be molded faster at lower pressures on conventional or fully automatic machines, utilizing simple, less expensive dies. We'll be glad to send information on how you can have parts molded faster, better, and with lower tooling cost using Plaskon Alkyd. Write today!



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UNCONTROLLED DUST that 'gets by' old-fashioned floor care . . . spreads air-borne bacteria that may cause absenteeism . . . redeposits itself in bins, shelves, finished products where it must be removed again . . . tracks into clean areas and makes floor surfaces unsightly and insanitary!

WESTONE CONTROLS DUST. Inexpensively. It's an antiseptic floor treatment. Inhibits the growth of certain bacteria right at the source. Loosens and picks-up all dust. Seals surfaces. Holds subsequent dust down for quick, easy removal. Keeps bins clean. Speeds materials handling. Reduces floor maintenance costs up to 50%. As a WEST representative can easily demonstrate. Without charge.

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West Disinfecting Company, 42-16 West Street, Long Island City 1, New York
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Gentlemen: I'd like to have a local WEST representative come out and give me a demonstration of Antiseptic WESTONE dust control.

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Company _____

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City _____ Zone. _____ State. _____

Show me
how to
save money
by controlling
floor dust

Inventory Limit

Severe regulations are going to restrict inventories of all war-essential metals to only 60 days' supply.

Rougher inventory controls are in the works.

By and large, no one will be allowed to have more than 60 days' supply of any important metal. National Production Authority has already cracked down on aluminum (BW-Nov. 18 '50, p34) and tin.

Ever since it came out in mid-September, NPA spokesmen have been vociferous in defense of their fuzzy Regulation 1 limiting inventories to a "practicable" minimum. But no one paid much attention. It was obvious that that ceiling could be interpreted as just about any amount of any material. And NPA had no way of checking on anyone's inventory.

True, Regulation 1, with its list of scarcity materials, had some "jawbone" effect. Many firms, especially larger ones, made serious efforts to hold down their stocks of shortage items. They didn't want to be called unpatriotic.

• **Loopholes Plugged**—But NPA has become more and more convinced that less-scrupulous operators viewed Regulation 1 as a hunting license with an itemized list of "fair game." So it quietly set about plugging the twin loopholes of vague language and lack of a police force.

The language gap was partly filled in the 35% cutback on civilian use of aluminum. In the uproar over this slash, its 60-day limit on aluminum inventories was scarcely noticed. Then last week NPA called for more detailed reports from the tin industry, slapped an identical inventory limitation on that metal. Probably ceilings on stocks of copper and other metals will follow.

• **Whip**—Enforcement—of inventory ceilings as well as other controls—is the business of NPA general counsel Manly Fleischmann. He has named John Peckham to head up his enforcement staff. Peckham headed WPB's New York field office in World War II.

• **Clarification**—Meanwhile, some of the fog was taken out of Regulation 1 by a clarification order. This directive specified that excess inventories could be worked off by canceled, reduced, or deferred orders of critical materials. It also allowed for excess inventories in special cases—such as a warehouse who was oversupplied only temporarily while passing along materials from producer to end customer. These interpretations are another indication that NPA is serious about inventories.

READERS REPORT

A Puerto Rican Reaction

Sirs:

The business community of Puerto Rico has been greatly disturbed by the recent unfortunate attempt on the life of our President and the possible effects it might have in slowing down in Puerto Rico the industrial development that has been progressing so well under our Governor Luis Munoz Marin.

In a letter recently written by Mr. Gerardo Molina are expressed very clearly the feelings of our business community in the following words:

"Puerto Rico has been abjectly subjected in the last few days to Communist-style and Communist-inspired terrorism—shameful events that bring grief and deep concern to every true Puerto Rican, the vast majority of us loyal American citizens."

"These events may have been presented differently in your local newspapers. They may have been labeled as 'revolutionary,' or 'political uprisings.' Let us assure you that this is not the case."

The government of Puerto Rico is genuinely representative of the majority of the population—democratically elected—and the minority parties have absolutely no grounds for serious complaint of the democratic way in which the public affairs are handled.

The unfortunate events of the last few days are the work of a small group of misled fanatics, an ill-assorted group of irresponsible men, inflamed by a misconception of ideals. In justice to Puerto Rico, we are writing you in a desire to convey to you a true picture of our local situation.

JOSE A. FERRE

EXECUTIVE VICE-PRESIDENT,
PONCE CEMENT CORP.,
NEW YORK, N. Y.

Kind Words Dept.

Sirs:

In the November 4 issue of your publication, there is an editorial on the last page, "Eisenhower's Newest Move." This is a very interesting editorial and a very timely one.

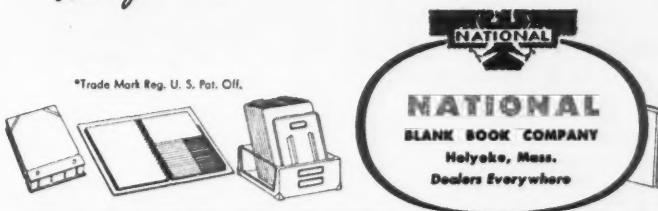
BUSINESS WEEK has been one of the magazines I have read most thoroughly ever since I first became acquainted with it. You are doing a fine job. Please keep it up.

HENRY G. ALLEN

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STERLING DIVISION,
ONEIDA, LTD.
ONEIDA, N. Y.

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of Eye-Ease* paper—
Isn't it restful
on your eyes?*

*When buying record-keeping forms
or ring-book fillers ask for EYE-EASE**



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Made in sizes to lift 250, 500, 1000, 2000 and 4000 lbs. Prices start at \$119. Write for Bulletin No. 391.



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Builders of 'Show-Box' Cranes, 'Budgit' and 'Load Lifter' Hoists and other lifting specialties. Makers of 'Ashore' Gauges, 'Hancock' Valves, 'Consolidated' Safety and Relief Valves, 'American' Industrial and 'Microsen' Electrical Instruments.

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The messiest chore in your office vanishes like magic with the new Magic Mailer. It's a terrific time-and-trouble saver for every office—handy for one envelope or 1,000. Just zip the envelope through and it's ready.

TRY IT FREE IN YOUR OFFICE! SEND NO MONEY!
Just write us on your letterhead and we'll send a sample. Please enclose postage. Use it for a week—and if your secretary will part with it, just return it and we'll cancel the charge! Otherwise, send us only \$6.95. Write today—because if you know the mixture that goes into some envelope glue, you'd never have envelopes to lick in your office again. Haldon Mfg. Co., Inc., 837 N. La Cienega, Los Angeles 44, Dept. B-1.

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FINANCE

New Money for Natural Gas: How 10 Companies Raised It

		Millions of Dollars	1945	1946	1947	1948	1949	1950
Columbia Gas	bonds				45.0	33.0	26.0	
	stocks				12.2	13.7		
El Paso	bonds	25.0	15.0	56.0	55.5	8.3		
	stocks	10.5	2.5			11.2		
Lone Star	bonds						85.0	
	stocks							
Northern	bonds	25.0		10.0	6.0		40.0	
	stocks					12.0	9.5	
Panhandle	bonds	50.0			30.0		96.0	
	stocks	14.0						
Tennessee Gas	bonds	50.0	40.0	25.0	50.0	40.0		
	stocks	7.0	19.5	10.0	11.4	21.5	17.5	
Texas Eastern	bonds			130.0	24.0			
	stocks			30.0				
Texas Gas	bonds				60.0			
	stocks				7.0			
Transcon-	bonds				32.0	143.0	32.0	
tinental	stocks				24.0			
United Gas	bonds				24.5		25.0	
	stocks							
Totals by years	bonds	25.0	125.0	219.5	278.0	281.5	352.3	
	stocks	21.0	30.0	42.5	54.6	47.2	38.2	

Total 46.0 155.0 262.0 332.6 328.7 390.5

Debt Makes Pipelines Grow

Natural-gas industry is one of the biggest raisers of capital since the war. And borrowed money accounts for about 70% of the haul. Reason: The business has a fairly predictable future.

Natural gas, one of the fastest-growing industries since the war, is also one of the biggest raisers of new capital. Pipeline companies in particular have contributed to this.

• **Capital Attraction**—Take the 10 companies listed in the table above. Starting in 1945, these companies have raised a total of over \$1.5-billion. When you add in other gas utilities, the total comes to about \$2.3-billion of new money.

That's a tremendous pile of capital for one industry to draw out of investors' pockets in six years. It doesn't set a record, though. Back in 1929, the investment trusts sold \$2.1-billion in new issues during one year alone.

The chemical and petroleum industries have also been in front of the pack in expansion since the war. They have paid for much of their growth out of earnings. But natural-gas companies have had to go to investors for their money. One reason is that gas and

pipeline companies' rates are regulated; they don't have a chance to plow back much of their earnings for expansion. And another reason is that much of the postwar expansion in natural gas has been done by companies that didn't exist 10 years ago (BW—Sep. 30 '50, p. 75).

• **Pipeline Problem**—The bulk of the \$2.3-billion raised by the industry since the war has gone into pipeline construction. The basic problem in natural-gas expansion is to bring the fuel from the major fields in the Southwest and along the Gulf Coast to new markets in the heavily populated Northeast, the Middle West, and on the West Coast.

This money raising is still going on, although some of it has now passed into the refinancing stage. Texas Eastern Transmission Corp., for instance, filed a registration statement last week with Securities & Exchange Commission for 200,000 shares of \$100 par value convertible preferred. Part of the money

will be used for expansion, part to retire an old issue of 2½% serial notes.

• **High Debt Ratio**—A significant characteristic of this huge volume of natural-gas financing is its noticeably high debt ratio. The typical capital structure of the new pipeline companies runs something like this: 70% debt, 10% preferred stock, and only about 20% common stock. Compare that with what's considered a satisfactory structure for an electric utility: 50% debt, 25% preferred stock, 25% common stock.

• **Predictable Future**—The new natural-gas pipelines were able to borrow such a high proportion of their capital because the business of transporting natural gas has a relatively predictable future. But perhaps the job couldn't have been done if it hadn't been for life insurance companies and other institutional investors who were looking for a place to put their rapidly growing funds.

The Institute of Life Insurance announced last week that life companies had bought about \$1-billion worth of natural-gas securities since the end of 1945. These careful investors were willing to buy bonds with only a slim cushion of equity to protect them. To understand why, you have to know something about the peculiarities of pipeline financing.

• **Case Study**—Let's take a fictitious but typical case, the ABC Transmission Corp. ABC was formed at the end of the war by a group of investment bankers and natural-gas engineers who wanted to build a pipeline from Texas to Super Podunk. They put up about \$1-million to pay the company's promotional expenses. That mainly included legal and engineering fees, some of which they themselves collected. In return, they issued themselves 500,000 shares of stock at \$1 a share, and took notes for \$500,000.

• **Customers**—ABC's backers then went to the utilities in the Super Podunk area and got them to promise to take gas for a 20-year period if the pipeline could be built. They got enough firm contracts to fill 65% or 70% of the capacity of their projected line over the 20 years. They also got enough short-term contracts to keep the line operating at peak capacity—summer and winter—for several years to come.

• **Suppliers**—At the same time, ABC went to the Texas gas producers and got firm contracts to supply gas for 20 years at, say, 5¢ per 1,000 cu ft. for the first two years, and 1¢ additional for each four-year period after that. They weren't able to get enough firm contracts to supply their line 100% for 20 years. Some owners of gas reserves were reluctant to tie their product up that long at those prices. But ABC got enough to make sure its line could

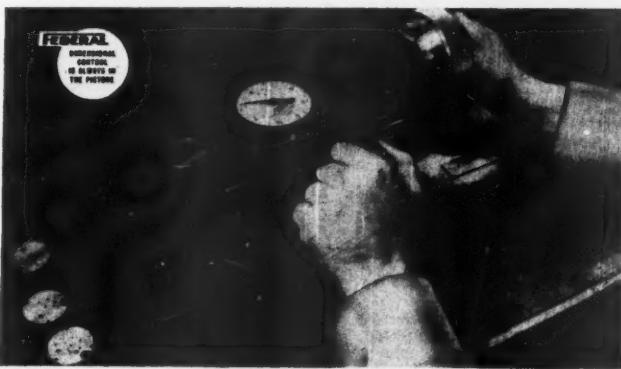


Another Company Served by Federal Indicating Gages

Time is the important problem at Telechron Inc. Here they make electric clocks that keep accurate time . . . and they use manufacturing techniques that minimize inspection time. A Federal Dimensional Indicating Gage assists in solving this problem. Here's how —

By controlling the mesh of gears and pinions, the Federal Gage contributes to the life and accuracy of Telechron Clocks. This Gage replaces a very complicated, lengthy, and tedious laboratory layout required to check the center distance of gear pivot holes in the movement plates. It makes this inspection in one fifth the time previously required and it assures dimensional accuracy before scrap is produced.

This is the kind of job Federal is doing for industries of all kinds—in fact there are over 20,000 individual gage designs in our files, each representing similar case where Federal has helped a company obtain better, more economical dimensional control. No greater fund of practical gaging knowledge is available anywhere. If dimensional control is your problem, consult Federal first. It's the natural and economical thing to do. Federal Products Corporation, 211 Eddy Street, Providence 1, R. I.



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Carelessness or indifference

Nearly all FIRES are the result of carelessness. Install GLOBE Automatic Sprinklers to stop these FIRES. That some plant owners WON'T do this isn't carelessness, it's INDIFFERENCE... and that's worse.

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COMPARE!

Comparison proves true value. Before you make a move, check the advantages offered in Savannah . . . willing labor . . . abundant, cheap soft water . . . competitive transportation . . . reasonable taxes and a cooperative community.

Let us supply you the data for a point by point comparison of Savannah's advantages. Complete, confidential engineering service no cost . . . no obligation . . . no commitment.

Savannah is different . . . and we can prove it!

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OF SAVANNAH, INC.
DEPT. E — P. O. BOX 3

Savannah
GEORGIA

Use "clues"
when you want to reach the executive market. Write for information.

operate at 100% for around 10 years.

Then the promoters of ABC went to the Federal Power Commission and got a "certificate of public convenience and necessity" that authorized them to build the pipeline. FPC satisfied itself that ABC had enough gas lined up to fulfill its contracts and that the contracts were bona fide.

• **Ready for Money**—At this point, ABC was ready to start financing. Let's say the construction job cost \$150-million. ABC decided to raise only \$30-million of this by selling common stock at \$10 a share. The original stockholders wanted to keep the stock issue as low as possible, in order not to dilute their equity. Also, big stock issues have been known to flop in Wall Street, which hasn't been eager to buy new equities in recent years.

In addition to the common, ABC decided to offer \$15-million worth of 5% preferred stock. Most of the money, however, came from a \$105-million bond issue, which was a first mortgage on the projected pipeline. The issue—70% of ABC's capital—was sold privately to a group of insurance companies at 3½% interest. It was due in 20 years, and a sinking fund was set up to retire it gradually over that period.

• **Sure Return**—The insurance companies were willing to accept such a high debt ratio because they knew ABC was sure to earn enough money to pay debt charges. They knew pretty well what ABC's costs would be for years ahead. Once the pipeline was built, its major cost would be what it paid for natural gas. The price of most of the gas needed to run at top capacity for 20 years was already set by contract.

The insurance companies also knew that ABC's market was secure, since it had already contracted to sell at least 65% of the capacity of its line for 20 years at rates to be set by the Federal Power Commission. That provided protection on the bond interest, as well as the preferred dividends.

• **Construction**—ABC went ahead and built its pipeline. That took about two years. Finally the line began to pour gas into the Super Podunk area. FPC allowed the company to charge rates that would earn it 6% annually on its net investment, after taxes but before interest charges. These rates were based on expected "normal" use of the line, say, about 92% of capacity.

• **Earnings**—ABC earned about \$9.6-million in its first year of operation. But that's 6% on a \$160-million investment—not \$150-million. How did ABC's original investment climb from \$150-million to \$160-million?

FPC allowed the company to add to its original investment a hypothetical interest credit on the funds invested in construction at 6% annually during the

construction period. Of course, the whole \$150-million doesn't go into the line at once. It was fed in gradually as work proceeded. The 6% allowance applied only as money actually was invested in plant.

• **Pay-Off**—Out of the \$9.6-million, ABC paid \$34-million for bond interest and \$750,000 for preferred dividends. That left nearly \$5.5-million in earnings for the 3½-million shares of common stock. About \$3-million were paid out in dividends. And \$500,000 went to pay the \$500,000 of notes held by the original stockholders. Some of the rest went into improvements to the line and some into bond redemptions. The common stock is now selling around \$11 a share, which would give the original promoters a paper profit of 1,000% before capital-gains tax.

Some of the bonds are redeemed each year, so the debt ratio begins to drop. However, ABC is planning to extend its pipeline, selling more bonds to pay for them. So its debt ratio is likely to remain high for years. After the expansion period passes, debt ratios will slide off.

Every pipeline company doesn't follow ABC's pattern exactly. Some pipelines are part of integrated gas systems, which produce all or most of their own gas, transport it by pipeline, and operate all the distributing utilities that distribute it. A few distributors own their own pipelines, too.

• **Looking for Trouble**—Things could happen to upset this pleasant financing picture. The price of oil or coal might get sufficiently low, in relation to natural gas, to hurt the gas industry. But there is not the faintest sign right now that this will happen.

Another possibility that sometimes keeps natural-gas men awake nights is that FPC might reduce the 6% rate of return it now allows the natural-gas pipeline companies.

• **Behind the Bull**—These factors probably don't have much to do with the fact that the natural-gas stocks have lagged behind the rest of the bull market in the last few months (BW—Nov. 18 '50, p121). The two main reasons for this, in the opinion of many Wall Streeters, are:

(1) An excess-profits tax will hurt many of the companies badly, unless something special is done for their relief. Even though FPC might still allow the companies to earn 6% on net investment after all income taxes, there would be quite a lag before the higher rates would become effective.

(2) Natural-gas stocks got overvalued before Korea because of the glamor the stocks held for investors. So the group has been going through a period of readjustment.

• **Inflationproof**—You can find plenty of people in Wall Street who insist

What does it take to help a woman make up her mind about a carpet?

It takes many things besides the product itself. One of them is salesmanship.

We believe that *salesmanship must be based on service and service must be based on facilities and skill*. We also believe it is part of our job to assist the retailers of Bigelow-Sanford carpets in providing that kind of salesmanship.

For example, we distribute directly to our 4300 retailers through 10 regional warehouses and 27 district sales offices. We want our service to the retailer to be as immediate and personal as is his service to his customers.

Another example: We are in the teaching business. Bigelow-Sanford operates three different schools for retail personnel. One is the traveling Carpet Selling Institute; the other two instruct store mechanics in carpet installation and cleaning techniques.

A third example: Our Store Planning Service was consulted last year by over 300 dealers who were modernizing their carpet departments—an average of more than one assignment per business day.

Our marketing methods have produced *quantity* sales of *quality* products. For the first three quarters of 1950, Bigelow-Sanford sales amounted to \$70,256,449, the highest in the industry's history. This represents an increase in carpet yardage of 36% compared with last year.

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says Lestershire Spool and Mfg. Company

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"BUT . . ." says Lestershire's purchasing agent, F. C. Weir, "the true value of your Ozalid machine cannot be measured in dollars and cents alone."

216 Times Faster!

For example, Lestershire manufactures industrial bobbins to order for R.C.A., DuPont, John Roebling and others. As the bobbins (or spools) are made to specification, every new production order calls for a different machine set up. Changing production prints used to take Lestershire 36 hours. Now, with Ozalid on the job, shop prints are available in ten minutes—216 times faster! Many, many times faster than even Ozalid promises.

Ozalid Copies Everything!

Today Lestershire is duplicating production schedules, factory forms, engineering drawings, form letters, office records, and even plant layouts, with Ozalid. Ozalid's versatility—its ability to do copying jobs for all departments—makes its application at Lestershire especially rewarding.

Average Savings 58%

Lestershire isn't a big company. They say: "We thought we couldn't afford Ozalid, but Ozalid's 'on the spot' prints, saving 58% of former copying costs—plus the speedy service—proved we couldn't afford to be without it."

Whether your business is large or small—manufacturing, engineering, accounting or selling—you can profit from Ozalid's versatility. Get the full story on how Ozalid can solve your copying problems—write for your copy of "The Simplest Business System," today!

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that natural-gas stocks are not likely to be hurt by inflation. They won't get squeezed between rising costs and inelastic rates. That's because their only major cost item is natural gas itself. And prices for most of this gas are fixed by contracts for years ahead.

U.S. vs. Bankers

Justice Dept. takes Investment Bankers Assn. and 17 underwriters to court in three-year-old antitrust suit.

After three years of hanging fire, the government's antitrust suit against the Investment Bankers Assn. and 17 underwriting houses may get to court this month. Last week Federal Judge Harold R. Medina set Nov. 28 for the opening of the trial. He will probably find it a bit quieter than the trial of the 11 Communists that he conducted earlier this year.

• **Conspiracy?**—Dept. of Justice contends that the 17 investment firms have conspired to control the securities-underwriting field by eliminating competition. It says that they have used IBA to lobby against regulatory laws.

The complaint states that the 17 defendant firms did about 69% of all security underwriting from 1938 through 1947. The Justice Dept. says that the same investment banker should not be allowed to advise corporations about issuing securities and then distribute these securities to the public.

• **Times Have Changed**—The case is a distant echo of the Senate's "Pecora investigation" of the securities business in 1933 and 1934. Wall Street first began hearing rumors of a suit in 1936. However, it was not until 1947 that the complaint was actually filed.

Wall Streeters point out that conditions have changed a lot since the early 30's. In those days, the terms of most security issues were worked out by the issuing corporation and a single group of underwriting houses. Often the investment firms involved had been associated with the issuer for many years.

But in recent years many new issues are being awarded by competitive bidding to the underwriter or underwriting group that offers the most favorable terms. All new public-utility and railroad issues, for instance, are required by law to be handled this way. And a good many other issues are placed privately with insurance companies and other financial institutions without any Wall Street house ever acting as an underwriter. Estimates are that only 20% or 25% of new issues are now negotiated between the issuer and a single underwriting group.

FINANCE BRIEFS

Dallas bank workers this year will celebrate Thanksgiving twice. Nov. 30 is the state's legal Thanksgiving; the 23rd is the day chosen for Dallas by its mayor. Banks will be closed both days.

New financing plans of American Telephone & Telegraph Co. were overwhelmingly approved by the stockholders last week. The program includes issuing up to \$435-million of new convertible debentures (BW-Nov. 11 '50, p110).

\$15-million of new \$100-par, 4.2% preferred stock has just been sold privately by Burlington Mills Corp. to several insurance companies.

Stockholders of Savannah's Citizens & Southern National Bank were in line for a new type of extra dividend. A special 25¢-a-share "cost-of-living" payment was voted by the directors.

New common stock totaling 200,470 shares will soon be sold publicly by International Minerals & Chemical Corp. Proceeds are expected to run around \$10-million. Directors may also propose a 2-for-1 stock split-up soon.

Sale of Appleton Co., 122-year-old cotton flannel and sheeting manufacturer, was approved by its stockholders. The purchaser: J. P. Stevens & Co., one of the nation's biggest textile units, which paid 221,373 shares of Stevens common, with a current market value of over \$9-million.

Knott Hotels Corp. bought the Alexander Hamilton Hotel in Paterson, N. J., and leased the Hendrick Hudson in Troy, N. Y.

Schenley Industries, Inc., got a \$25-million long-term loan from a life company group and arranged to extend maturity of \$50-million in bank loans from 1955 to 1958. Schenley's long-term debt now totals \$100-million, two-thirds of it to institutional lenders.

Higher construction costs: Pennsylvania Power & Light Co. now figures its 1950-54 expansion program will require \$34.9-million in new capital, instead of \$24-million. Some 475,000 shares of new common—expected to supply close to \$12-million—will soon be offered to stockholders.

Cleveland Union Terminals will soon sell \$40-million new 1-to-16-year serial bonds to refund the \$41.6-million of 4½%, 5%, and 5½% bonds.



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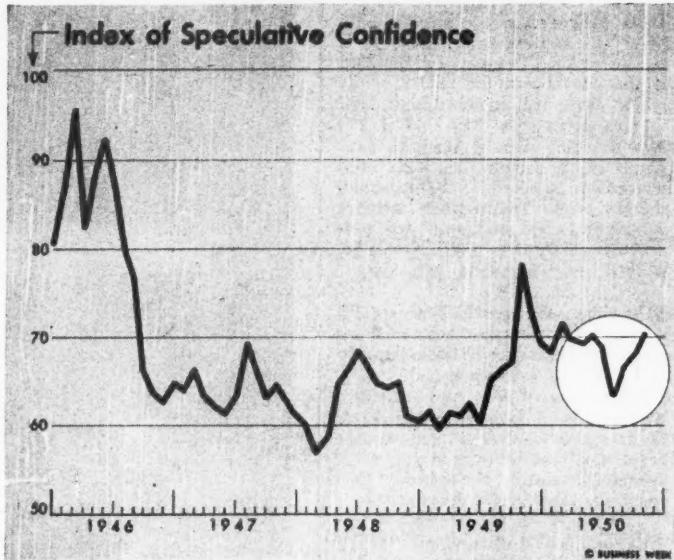
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THE MARKETS



Confidence—But Not Too Much

Relation of stock prices to business activity shows that market has recovered from Korea jitters. But high short interest indicates bears still think a drop is coming.

In spite of war uncertainties, there has been a good deal of speculative push behind this bull market. You can tell that by the way the low-priced shares have been outpacing the high-grade shares (BW-Oct. 28 '50, p118). And you can see how speculative confidence has increased if you divide an index of stock prices by an index of business activity.

• **Indicator**—The chart is based on Standard & Poor's 90-stock index and the BUSINESS WEEK Index of Business Activity. This "index of speculative confidence" is supposed to give you some idea of what traders—the men who buy and sell to catch short-term trends in the stock market—think is going to happen next. If stock prices rise faster or fall slower than business activity generally, it indicated that traders feel confident.

The chart shows that speculative confidence has now recovered from the shock of Korea. It certainly gives no hint that any significant down turn is coming in the stock market, as it did in early 1946.

But it's difference of opinion that makes horse races—and stock markets. There are still plenty of people around

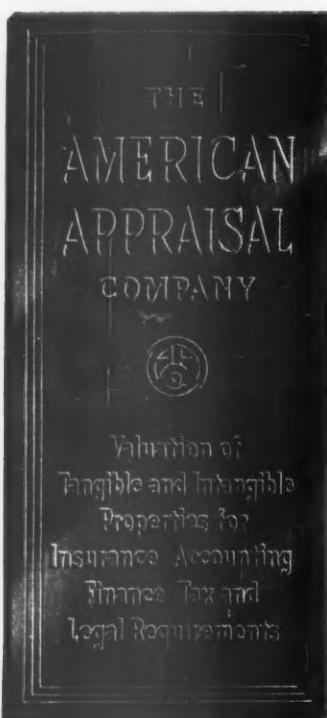
who think the market is due to drop. Their numbers seem to be growing.

• **Short Interest**—Last week the New York Stock Exchange reported that the short interest in Big Board stocks at the close of business Nov. 15 was about 2,276,000 shares. That's a sizable jump from the short interest of 2,044,000 shares reported on Oct. 13. There was a big increase of the short interest in such key groups as steel, automobiles, and television.

Of course, bulls always argue that an increase in the short interest makes a bull market that much stronger. They figure a large short interest cushions the market. If prices drop, the shorts buy stocks to cover their positions and take their profits. That provides buying support for the market.

• **Weakness**—In their turn, the bears point out some signs of technical weakness in the way the market has been acting lately. Early this week, the Dow-Jones industrial average during the day's trading climbed above the post-war high for closing prices of 231.81, set on Oct. 7. This was the first time since Oct. 7 that the "intraday" average had passed this level.

Normally, you would expect such an



event to set off a rush of buying. What actually happened was that stocks churned about for a while and then went lower. Traders had cashed in their profits. Probably quite a few were unwilling to carry paper profits through into 1951, when the capital-gains tax may be higher. Others may have felt that the rise was over, temporarily.

• **No Volume Rise**—Bears also make a lot of the fact that, while stocks have been rising in most recent sessions, daily volume has failed to rise. In other words, fewer and fewer people are willing to buy stocks at rising prices. This is ordinarily a sign that any current upward move won't go much further.

Municipals Bog Down

Don't be fooled by the surface price firmness that's been reflected recently in municipal-bond-yield averages. All's not well in the tax-exempt market; signs of stress and strain have been increasing.

• **Inventory Rise**—The chief symptom is a persistent and steep rise in the size of Wall Street inventories of unsold municipals. Early this week, this float reached an all-time high of \$251-million.

That figure is 23% higher than the previous record of \$203-million. And it's a far cry from the modest \$80-million float of last July, when "warscared" buying of tax-exempts was rampant (BW—Aug. 5'50, p76).

The tax-exempt market depends on special classes of buyers. And these buyers are even more lukewarm toward present prices than they were to those of late last summer (BW—Sep. 2'50, p71). At the same time, the market has been called on to absorb an increasingly heavy load of new issues.

• **Little Business**—This state of affairs hasn't yet shown itself in the price averages; how soon it will is an open question. At the present quotations, little business is being transacted. And last week more than a few dealers decided it might be wise to consider lower-than-market bids made for some of the staler items on their shelves.

The dangers of this week's record-breaking inventory may be more apparent than real. It may be too much to expect the market to absorb the huge amount of new issues without taking a few breathers.

• **Worries**—Nevertheless, some Wall Streeters are disturbed by the situation. That's because there are many factors present that would normally spur the buying of tax-exempts—such as persistent talk of higher taxes; the firmer price trend of bank-eligible Treasuries; the rejection by the voters of an above-normal amount (for the postwar period) of proposed municipal issues (BW—Nov. 18'50, p118).

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Serene CIO Convenes

A year ago, in Cleveland, a right-wing CIO majority authorized its officers to purge the Communist-line brethren. That cost the organization affiliates with close to 900,000 members.

This week, in Chicago, the CIO claimed: (1) that it was now Simonpure; and (2) that it had won back 70% of the purged unions' dues-payers.

• **Gains Claimed**—It claimed, in fact, that it was bigger and stronger than ever. Bigger, because in getting back about 650,000 of its former members it had won 1,072 bargaining polls during the year, which brought in new recruits. Stronger, because it was now no longer a house divided between warring rights and lefts.

Whether the CIO really is bigger and stronger could be debated. As a matter of fact, the convention seemed to be debating the subject itself as it charged that the Taft-Hartley act was putting a hammerlock on the American labor movement. But what was clearly beyond argument was the fact that the CIO convention—minus Communists—was as quiet as a trade association meeting.

• **Unrealistic**—The old demons were still around: Taft-Hartley, the Communist issue, reactionaries in Congress,

etc. But they were being exorcised with less vigor. Indeed, on Taft-Hartley it looked as though the CIO might be preparing an exit for itself from a position that had become unrealistic.

While the "slave labor law" was still condemned, and "outright repeal" was reiterated as CIO policy, some convention delegates privately expressed other views. Their reasoning:

We won't get another chance to try to ditch T-H for two years. In the interim, we're going to be pinched pretty hard by some parts of the law that can be got rid of.

So the unions might inconspicuously take this tack: They will neither outwardly support nor oppose some proposed modifications in T-H; but they will give behind-the-scenes aid to efforts to get rid of the union-shop-election rule and to other amendments.

• **Legislative Goals**—CIO plans to toss its weight behind: (1) a \$1-an-hour minimum wage; (2) increased benefits and coverage under federal social security; (3) a "really anti-inflationary" excess-profits tax; (4) more federal aid for schools; (5) improvements in unemployment insurance, to increase and standardize payments and to wipe out "the present ineffective and harmful

decentralization"; and (6) an "adequate" federal housing program.

• **Policy Making**—CIO also plans to go after "more real policy-making representation in the State Dept., in ECA, and in the Voice of America.

Needless to say it wants a similar new and genuine responsibility in both the mobilization and anti-inflation programs.

Only two controversial issues at the convention really attracted attention. One involved a fight against the reelection of John Green, of the Shipyard Workers, to a CIO vice-presidency. The other involved official CIO position on public power.

• **Prosaic**—Thus the business at hand was pretty prosaic—nothing to bring out the name-calling, near fist fights, and other shenanigans of recent conventions.

CIO officers recognized this before anyone else: On opening day, every delegate got a "memorandum" on the convention headed, "It may be duller, but—" But what? "It won't be of any less importance."

Raise for Million

Cost-of-living index will probably bring 2¢ an hour more for workers covered by escalator contracts.

A million workers will get a pay boost in the next week or two, probably 2¢ an hour. They are the workers covered by the General Motors-type escalator contracts. The next Bureau of Labor Statistics cost-of-living figures—due next week and dated mid-October—will give the signal for the raises.

Washington wage experts are as worried about the 2¢ raises as they are about the coming boost in steel, which will be much fatter. They see still more trouble for wage stabilization.

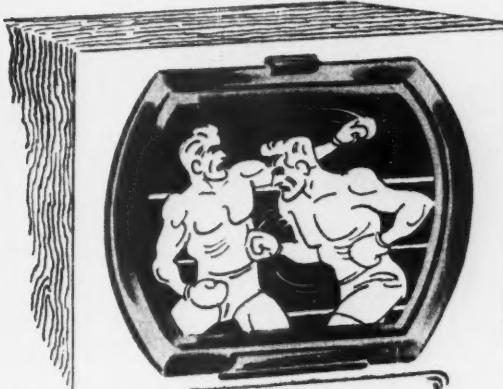
• **Automatic**—The c-of-l raises will go into effect automatically on Dec. 1 under all contracts that use the GM adjustment dates.

In mid-September, the BLS index stood at 173.8. If the mid-October figure is reported at 174.2 or over, General Motors' 325,000 hourly paid employees will get a 2¢ raise, and 700,000 other workers will get somewhat less. If the figure is up to 175, the other workers will get 2¢. The difference: GM allows 0.8-point "correction" in BLS figures to cover higher housing costs.

There is little doubt that the index will show some rise, probably enough to give the GM workers 2¢. Many forecasters think that all workers under the GM-type will get at least 2¢; some feel that the GM workers, at least, will get

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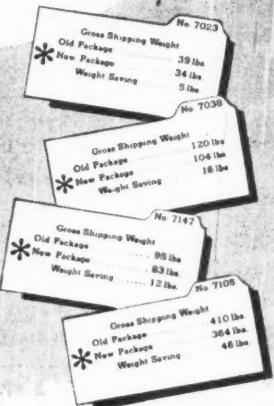
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3¢ (due when the index goes to 175.3). Government wage stabilizers are reconciled to this much. What haunts them is that the BLS index will continue to go up—carrying wages with it.

• **Inflationary**—The direct tieup between wages and the index makes the c-of-l escalator a potent inflationary force. If living costs continue to go up, so will hourly wages. That will help push prices and living costs up again. Then wages adjust once more. It's an automatic spiral.

Most government experts feel that c-of-l clauses are so firmly established that it would be hard to suspend them in a stabilization program. There would be too much labor resentment if costs went up afterward, despite price controls. The Office of Wage Stabilization leans toward the idea that workers should be allowed c-of-l increases (BW-Oct. 21 '50, p112) if the index goes up. The government meanwhile should concentrate on keeping the index steady.

• **Loophole**—Many unions have figured that a c-of-l clause is not only a good device for keeping wages and living costs in balance now, but might also provide a useful loophole for continued raises if the government invokes wage controls.

That's why a lot of unions have been plugging so hard for c-of-l clauses. Of 1,000 settlements filed with BLS in September, '50 provided for periodic c-of-l adjustments. That's a high figure when you remember that a few years ago unions were solidly opposed to c-of-l contracts of any kind.

• **Dissenters**—The sentiment in favor of escalator clauses is still far from unanimous. Most AFL unions haven't changed a bit in their opposition to any linking of pay to the c-of-l index. A group of CIO unions, including the United Steelworkers, feels the same way.

In the philosophy of Philip Murray, a c-of-l pact "ties workers to the wheel of destiny"—and doesn't permit any economic advances.

The steelworkers have steered away from the c-of-l formula so far in 1950 bargaining. They have been negotiating with U.S. Steel for a straight, hourly wage boost. Last week they signed with Timken Roller Bearing Co. for a flat 10% hike (averaging about 17¢).

• **Straight Raise**—The United Rubber Workers (CIO) also stuck to straight wage demands in recent bargaining. The union says its members "want no part of any c-of-l plan. They don't want to take a reduction of even a few cents an hour if the cost of living drops." Major tire manufacturers finally settled for an average 12¢-an-hour raise.

The United Packinghouse Workers (CIO) is bucking the c-of-l trend by insisting on flat and irrevocable boosts in hourly pay. It says: "A cost-of-living adjustment contract would put the

union on a treadmill... and we would never get what we're after. Price rises come first; wage increases then become fundamentally a device to try to catch up with higher living costs. Once the merry-go-round starts, wages won't and can't catch up, except very briefly."

It's fine, says the union, to use the c-of-l as an argument for a wage increase—but it shouldn't be used as the sole basis for a hike in pay.

• **Left-Wingers**—The most vocal opposition comes from left-wing unions, such as the United Electrical Workers (ex-CIO) and its affiliated Farm Equipment Workers. But some of the left-wing group have had to sign escalator contracts, like it or not. The Farm Equipment Workers recently signed one with International Harvester, after the United Auto Workers (CIO) took a similar settlement. The left-wing union complained it was left in "an impossible situation."

The left-wingers argue that GM-type contracts don't protect workers against "higher taxes in 1950 and still higher taxes in 1951," so workers will take a cut in take-home pay and in buying power. Also, they say, the GM formula "sets a static living standard for workers—but lets the employer's profits continue to increase. The worker doesn't get his share of the wealth and profits of industry."

• **All Locals**—The Auto Workers are still the big advocate of c-of-l pacts in CIO. Since it started the trend (with GM in May, 1948), UAW has signed escalator contracts with 63 companies, covering 516,000 workers. It wants all locals to insist on GM-type settlements when negotiating anything except short-term contracts (BW-Sep. 30'50,p110).

Moreover, UAW says the GM plan is the very least that any "acceptable" pay stabilization formula should allow. If the GM formula isn't used intact in setting up wage controls, then, the union says, its c-of-l and 4¢ annual "improvement factor" raise provisions must be the minimum allowed in a wage freeze.

The possibility that wage stabilizers might pick up the GM formula as a guide to their official policy doesn't worry unions that dodged c-of-l agreements. The International Ladies Garment Workers (AFL), for instance, admits "we may be caught if a wage freeze is invoked, but we believe we are better off just the same with straight wage increases and reopenings in 1951, 1952, and 1953." And, it said, it's not "pinned down to a plan that might make workers take a pay cut."

ILGWU and the other unions without automatic c-of-l raise clauses argue: If government allows any escalator raises, it must let companies with fixed wages "adjust" to them, too. So, c-of-l or no, it's all the same in the end.



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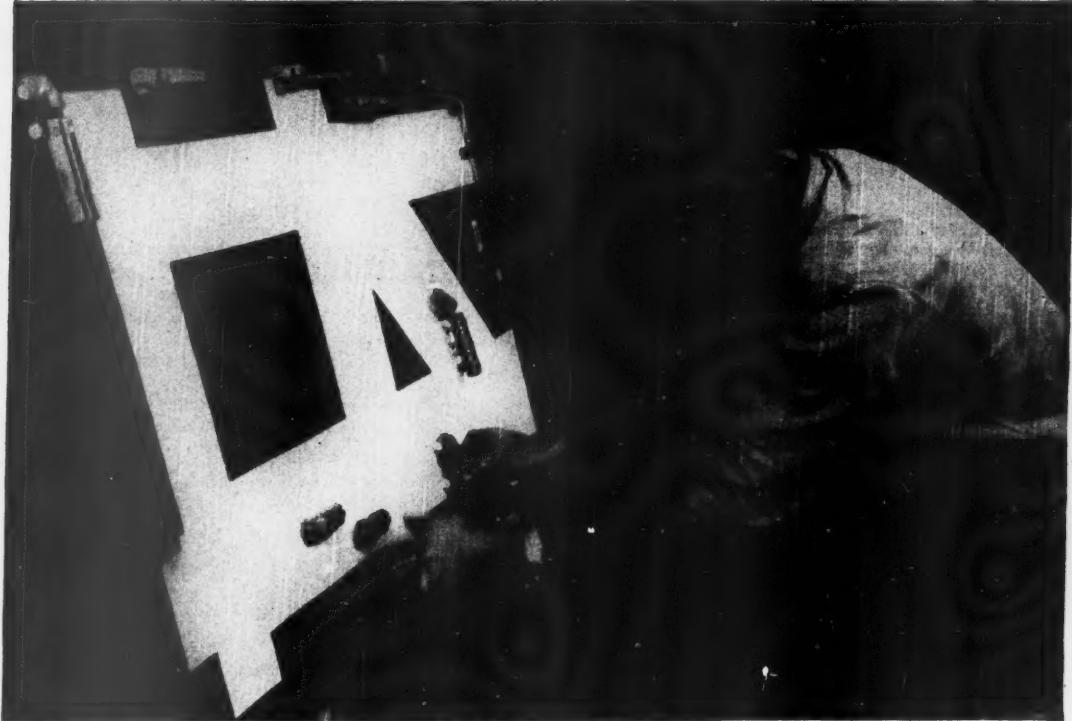
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The Case of the Waffled Truck



"I was just coming out of the garage, five minutes after I started work for the day."



"The motorman of a parked trolley waved me on, to pass him. As I gave it the gun . . ."



". . . a truck came across the intersection from behind the trolley. I waffled him . . ."

Union-Employer "Court" Cuts Wrecks

A chance remark dropped in Philadelphia in 1949 led to a drop in truck accidents in 1950. One employer made the remark to another during a lull in contract talks with an AFL teamsters local. A union officer overheard it and agreed.

The remark: "Something ought to be done to make our safety program work. It takes more than words."

• **Court Set Up**—That comment led to a joint management-labor accident "court" that meets weekly to fix blame for every truck mishap—whether it involves \$1 in damage or a complete wreck. Two employer representatives and two union men form the hearing board. A driver summoned to appear must attend, on his own time, and answer all questions. He can't work again until he does.

The court doesn't punish drivers found at fault in accidents, although it does give verbal reprimands and suggest safer driving procedures. It fixes the blame for an accident and sends a copy of its findings to the driver's employer.

The toughest drivers in Philadelphia find the court an ordeal. Most admit they'd rather tangle with the law—either the cop on the corner or a traffic court judge. The word on the management-labor court is: It gets rough as hell.

• **Whose Fault?**—Tough talk and excuses don't go. The four-man board reads an insurance-company accident report to the driver involved. Then the driver takes over. He gives his version

of the accident and moves model trucks and cars on a magnetic board to show how it happened. The board shows streets, traffic markings, and signals.

After that, the going gets rough. Union and employer representatives fire questions at the driver. The union men, in particular, know where a man can slip up in safe driving; they've been behind the wheel themselves. They have the driver's interests at heart as his union representatives, but they often make him squirm. It was a union representative who asked:

Q. You get paid for overtime?

A. Sure.

Q. Then there wasn't any need for rushing to get back. How much time do you think you gained by trying to assert your right of way?

A. I didn't think of that.

Q. Only maybe a couple of minutes.

The driver's trailer-truck had hit a parked car in trying to swing around a trolley car.

In another hearing the same night, a union man questioned a driver about his choice of a route.

Q. That's a mighty busy street at that time of day.

A. There's a lot of traffic, all right.

Q. Instead of cutting into that traffic street, wouldn't it be better to go around the block?

A. Yeah, but my boss don't pay me for no joyriding.

• **Judgment**—After the questioning, the driver is excused while members of the

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"I've had six accidents in five years. If I was the boss, I'd blow my top."

hearing board vote on the degree of blame for the accident—from no responsibility to 100% blame. The driver is informed of the decision and so is his boss and union. Any punishment is up to the employer and is determined by company policy.

• **Board Members**—Employer members of the board are chosen by the trucking association. They can't be connected with any employer whose drivers are scheduled for a hearing. And they must have attended a number of hearings as observers to be eligible to serve on the court.

The teamsters union names the union representatives, who also must have served an apprenticeship as observers. The union men flank the defendant at the hearing table to give him some moral support.

• **Costs Shared**—The trucking association and union go 50-50 on the cost of the program. Hearings are held in the



"But I promise you I won't come back here for no more such nonsense. I swear it."

conference room of the local union; space is available there, and, besides, that location seems to make drivers even more conscious of the seriousness of the hearings.

What has the program accomplished? There aren't any figures. But J. Wallace Fager, of Miller North Broad Storage Co., secretary of the trucking association, says: "The plan would certainly have died a natural death a long time ago if everybody wasn't sure of the good results."

Company executives agree their books show a decline in accident costs, despite the fact that equipment and repair prices are up again this year. The teamsters local says there has been a "healthy" cut in lost time for members due to accident injuries. And it's been done, both the union and management point out, at a time when the number of trucks in operation has risen in Philadelphia.



VOTING ON THE BLAME, the labor-management panel is making pretty sure that Charlton won't be back. He has learned the hard way.

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LABOR BRIEFS

"Outright socialism" is what Dave Beck's teamsters called a plan for forced deductions to pay disability insurance in Washington state. Despite the backing of other AFL leaders, the proposal got snowed under in a referendum.

Gripes about parking prompted General Motors to buy up space for a parking field four blocks from its Detroit office building.

Profit-sharing problems will be talked over when representatives of 270 companies meet in Cincinnati Nov. 30 and Dec. 1. The Nonprofit Council of Profit-Sharing Industries (Akron) will be the sponsor.

Pension demands (for \$100 a month, including social security) will be made by CIO's textile union. It has held off up to now because of shaky business conditions in the industry.

Retirement credits were made up by Elgin Watch for employees laid off temporarily during 1930-34 and 1938-39. Elgin paid \$900,000 into its fund.

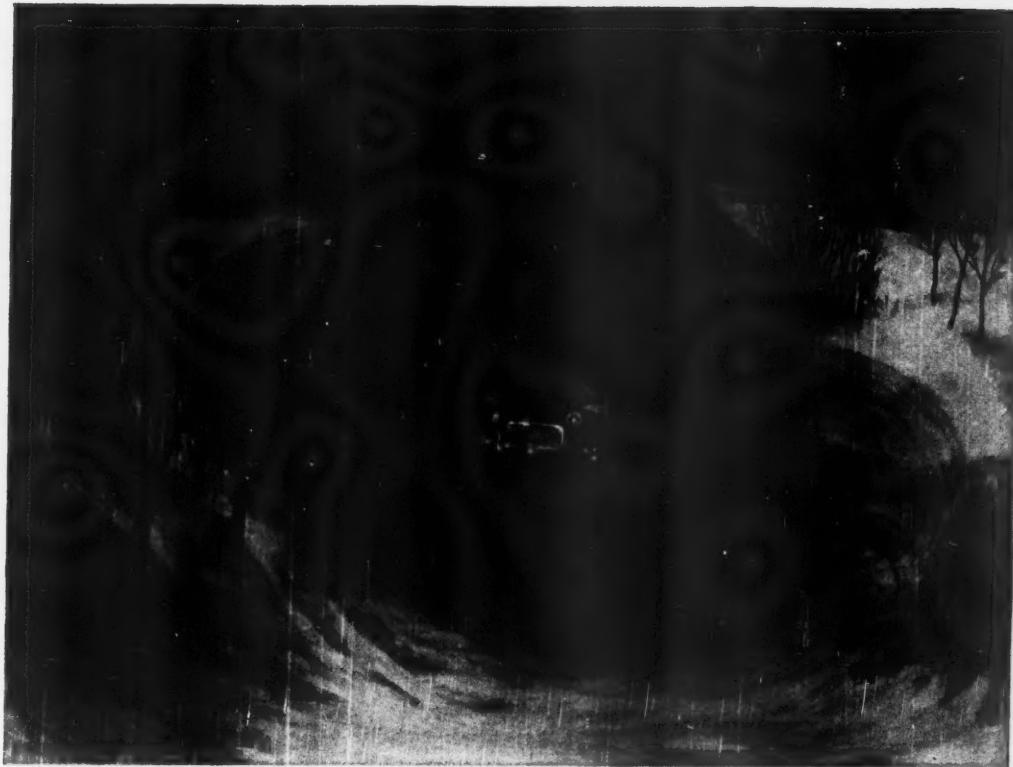
A union-shop poll of National Tube Co. steelworkers last week showed that of 21,460 eligible, 11,554 favored a union shop, 4,381 opposed one. That's a 53% vote of approval, unusually low.

A white-collar pact between Westinghouse Electric and the Federation of Westinghouse Independent Salaried Unions gives office workers a \$17.35-a-month raise, or 5% if that figures out to more. It's about the same as a 10¢ hourly raise.

Wage dividends paid by Eastman Kodak will reach a 39-year peak this year, with \$18-million going to 45,000 employees. They'll get \$27.50 for each \$1,000 earned at Eastman over the last five years.

A wage boost at Glenn L. Martin will give hourly workers 9¢ to 13¢ more an hour; salaried employees get about a 6% hike. A new pension plan, which goes into effect Mar. 15, will raise benefits to \$112.50 a month.

The Pictures—Cover by Robert Iscar. Acme—21; Rus Arnold—80, 82, 86 (top); McGraw-Hill World News—120; Wide World—123; Dick Wolters—25, 68 (rt.), 104, 108, 109, 110.



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In the rubber industry it has been the same story: better methods, better products and better controls. Here is one room of 36 heavy duty tire building machines, all fully equipped with Cutler-Hammer controls.



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INTERNATIONAL OUTLOOK

BUSINESS WEEK

NOVEMBER 25, 1950

SERVICE

The U. S. is in for a double dose of trouble in West Germany.

On the political front, there's the defeat of Chancellor Adenauer's party in the elections in Hesse and Wurttemberg-Baden. Since the Social Democrats won by campaigning against rearmament now, that's a real setback for Washington.

On the economic front, there's the problem of Bonn's big trade deficit with other Marshall Plan countries. If German trade isn't balanced this winter, the U. S. probably will have to foot the bill.

The Social Democrats' victory just about gives their leader, Kurt Schumacher, a veto over major issues like rearmament.

Schumacher's position on the arms question is this: no rearmament until (1) the German people give their approval in new national elections; (2) the U. S., Britain, and France provide enough troops so that the Elbe line can be held against a Soviet attack; and (3) German forces are given complete equality in any joint European army.

Schumacher's bark may be worse than his bite, of course. But the U. S. won't be able to ignore his views any longer now that his party is proving the strongest in West Germany.

The State Dept. still hopes that West German exports soon will go up enough to cover Bonn's deficit with the European Payments Union (BW-Oct. 28 '50, p115).

State is counting on two things to turn the trick:

(1) The big increase in West Germany's production. This is now 136% of prewar, as against 96% at the end of 1949.

(2) Stiff financial controls aimed at German hoarders. Squirreling away of industrial materials has been the chief cause of Bonn's heavy imports.

At the moment, EPU is covering Bonn's deficit with an emergency credit. But this must be paid off by next March. If the Germans still are overdrawing their account then, dollars will have to be paid to EPU—which probably means dollars from Washington.

Containment is the new U. S. policy on Red China. You won't hear any more wishful talk of Chinese "Titos" for a while.

The U. S. will push ahead in Korea. The worst that can happen, as Washington sees it now, is a military stalemate on the Yalu River.

Over-all, the U. S. knows the West has a vast job ahead of it if we're going to contain communism in Asia and build up Europe's defenses at the same time (page 117).

If French planners have their way, the anticartel features of the Schuman coal-steel pool will be really tough.

Here's what the proposed Schuman Plan treaty would do:

(1) Bar all agreements for fixing prices, allocating markets or clients, limiting production. (The proposed "high authority" would level heavy fines against offenders.)

(2) Outlaw all mergers or changes in financial control without prior permission from the authority. Private individuals owning 10% or more of the stock in any enterprise within the pool would need permission to buy more. Approval would not be given if such a deal would give any single

INTERNATIONAL OUTLOOK (Continued)

BUSINESS WEEK
NOVEMBER 25, 1950

interest or group of interests control of 20% or more of the total market.

(3) These provisions would be retroactive, thus striking at existing, as well as future "restrictive" situations.

The State Dept. has put aid for Yugoslavia on its must list. Secretary Acheson wants \$85-million from Congress as soon as it reconvenes next week.

A pending agreement between Yugoslavia and the Vatican should help Tito in Congress. (Apparently, Tito is ready to restore freedom to the Catholic Church in Yugoslavia.)

But some Republicans may demand a price from the State Dept., too—more aid for the Chinese Nationalists on Formosa.

The Kremlin is tightening up political control of the Red Army.

General Merkulov of Beria's MVD (secret police) has just succeeded L. S. Mekhlis as head of the Ministry of State Control.

This post makes Merkulov political boss of the army.

France's trade surplus took another upward bound last month. But you don't find too many French businessmen overjoyed about it.

The October surplus rose to nearly 26-billion francs. That compares with the September surplus of 8.3-billion, and an average monthly deficit of 20-billion earlier in the year.

But here's a joker: The surplus is almost entirely due to higher raw-material exports. French industrialists fear that France is thus foolishly working itself into a shortage. So it's likely Paris will slap on some new export controls before long.

Britain's world trade position looks better each month.

On the basis of July-October figures, the British should earn a £200-million surplus for the second half of 1950.

Here's the story: Britain's visible (merchandise) exports now pay for the goods Britain imports. What's earned from invisible exports (income from overseas investments, foreign oil operations, shipping, insurance, tourists) is all gravy. That means Britain is doing better than before World War II. At that time, invisibles had to help pay for some of the imports.

As things look now, the 1951 surplus will be well over £400-million—unless (1) prices of British imports go up too high; or (2) rearmament drastically cuts down British exports.

Britain is near the bottom of its coal bin—so near that it's trying to buy coal in the U. S.

For the British, this is bad business. U. S. coal will cost dollars, and the final price will be at least 40% above the price of British coal.

But stocks are so low that a cold winter would cause an industrial breakdown. The government can't afford a repeat performance of the shivering, coal-short winter of 1947.

Britain's coal troubles this year are due to a steady loss of mining manpower and to increased consumption by British manufacturers.

All Europe is feeling the pinch, too. British coal exports to the Continent have been cut, thus aggravating a general European shortage caused by a production lag in West Germany and Poland.

BUSINESS ABROAD



1945: Russia said it was fenced in by the capitalist countries.



1950: Russia has the fence down, is trying to encircle capitalist U.S.

From Both Sides, a Russian Threat

Red China's entry into Korean war brings Soviet encirclement policy into open. In Asia and Europe, drive is to isolate U.S.

To U.S. foreign-policy makers this week one fact seemed inescapably clear. Red China's intervention in Korea proves Stalin isn't abating his drive to isolate the U.S. He wants to push it out of Asia, then out of Europe.

Stalin has dropped all pretense that Russia is just defending itself against "capitalist encirclement." Rather, he has stepped up his drive to encircle the citadel of capitalism in the U.S.

If Stalin were more of a Hitler, he might think the moment opportune for a world war. But by temperament and experience Stalin prefers to make his gains by waging worldwide civil wars and by using diplomatic and propaganda tricks. And until he has enough atom bombs for a decisive blow at the U.S., he will probably stick to these tactics.

• **China, Bomb**—Two events in 1949 set the stage for Russia's new outright

policy of U.S. encirclement. The first was the Communist conquest of China; the second, the Soviet development of the atomic bomb.

Korea last June was the first fruit of the new expansionism. A Korean victory was meant to undermine U.S. influence in Japan, finally lead to Russian control. Beyond that, it was meant to shake American prestige in Europe. The aim there was to give Moscow a chance to defeat Tito in Yugoslavia and strengthen its own position in Germany.

For a while late this summer, it looked as if the U.S. had blocked

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Stalin's Korean adventure. The feeling was that Russia would take a setback as it had in Iran in 1946, in Greece in 1947-48, and in Berlin in 1949.

But it didn't work that way. Stalin grew more and more convinced he could not lose face again. In Europe, he saw the Communist parties begin to lose members at dangerous rates. In Asia, he saw the makings of an entente between Mao and Nehru. Confronted with all this, he called in the Chinese Reds.

• **New Strategy**—Thus today, Stalin's Asian strategy probably lines up something like this:

In Korea, use Chinese Communist forces and North Korean guerrillas to force the U.S. hand. Get it either to pull out of Korea, and make concessions to Moscow in a Japanese peace treaty, or fight a long war of attrition.

• In Indo-China, use Ho-Chi-Minh's forces, plus Chinese reinforcements, to push the French out of the country. Then put more pressure behind the Communist uprisings in Burma, Malaya, and the Philippines.

• In India, stir up peasant uprisings and then reverse the act by offering India a nonaggression pact. (It's reported that Moscow already has printed maps showing Kashmir as a part of Tibet. This could be part of the softening-up process.)

• **Concessions**—With this kind of Asian strategy, Stalin can force the U.S. into what is in effect a two-front war. Washington, of course, still hopes it can avoid a head-on clash with Communist China by making some concessions to Peiping. But even if this works out, the U.S. still faces a smoldering war in Asia—from Korea through Indo-China to Malaya. And in Europe it has a cold war that could grow hot at any moment.

Thus Washington's problem is twofold. It will have to find the manpower and money to check Red expansion in Asia. At the same time, it must bolster up Western Europe with military and economic aid, plus new American divisions.

• **Europe Costs China**—There is no question but what Europe has been and is still uppermost in U.S. policy. This explains why the U.S. didn't intervene decisively in 1947 to keep China from going Communist.

The decision on China was based on this reasoning:

There are only three centers of war industry in the world outside of the U.S. and Russia—Britain, Japan, and the Ruhr-Belgium-Northern France complex. The U.S. couldn't afford to let Russia take over any of these three, even if it meant spending billions of dollars in aid or a shooting war to checkmate Moscow.

China, on the other hand, has no war industry to speak of and won't have for

20 years or more. But to save China from the Communists could have cost as much as saving Western Europe and far more than bolstering up Japan.

Washington's foreign experts still feel that if either China or Western Europe had to be sacrificed in 1948, the only choice was to let China go. But there's no doubt that Washington underestimated the consequences of a Communist victory in China. And it failed to see the opportunities it would give Moscow to drive us entirely out of Asia.

• **Drive on Europe**—Like the U.S., Stalin keeps his policy in Asia secondary to his goal in Western Europe. He still aims to get control of all Germany and then to watch the rest of Europe fall in his lap. For example, it's safe bet that we could get Stalin to calm things down in Asia—temporarily, of course—if we'd agree to the kind of German unification he has been asking for. That would remove the threat of a rearmed Germany and give Russia access to the output of Ruhr industry—something Moscow desperately needs if it's to expand living standards in Russia.

Stalin all along has tailored his Asian tactics to serve a purpose in Western Europe, too. The theory is that Communist victories anywhere in the world undermine U.S. prestige, and hence the Western European will to resist. That the theory works has been proved in France.

France has had the jitters twice in the past few months. The first time was when the North Koreans seemed to be winning, the second when the Chinese Communists intervened.

There's also the fact that Communist victories in Southeast Asia would weaken the economies of Western Europe, especially Britain, France, and the Netherlands.

• **Counterpressure**—Of course Stalin's successes in Asia also have the effect of prodding Western Europe to rearm. And for the U.S., there's a net gain in that. Washington is desperately trying to put Western Europe in a position to defend itself against a Russian attack before Stalin has enough atom bombs to strike hard at the U.S.

Washington's basic strategy today can be put in a nutshell: Stalin will think twice about starting World War III until he has a good chance of delivering a knockout blow at the U.S. On the other hand, American atomic superiority won't be decisive until Western Europe has the power to hold off Russia's massive land armies.

• **Stalin Shifts**—Playing a game like Stalin's takes some fast footwork when things go wrong as they did in Korea this summer. There's evidence that Stalin expected a complete victory in Korea by Aug. 15 and that this was to be followed by a Bulgarian attack on Yugoslavia. When the U.S. check-



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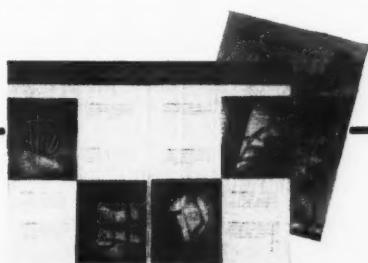
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November 15, 1950

The Board of Directors has declared a quarterly dividend of 37½¢ per share on the outstanding Common Stock of the Company, payable December 20, 1950, to stockholders of record at the close of business on December 8, 1950. Checks will be mailed.

CHARLES C. MOSKOWITZ
Vice Pres. & Treasurer

mated Stalin, he had to revise his plans in a hurry.

Meanwhile, the Communist parties in Western Europe began to lose members at alarming rates. In Western Germany, the Communists lost about 25% of their membership from June to August. In France, the loss was around 30%. At the same time, the French government managed to weaken the party's sabotage squads.

• Nehru-Mao—Developments in the Far East during the summer were even more of a threat to Stalin's world aims. It's now known that American victories in Korea led to close relations between New Delhi and Peiping. Prime Minister Nehru of India started working for an Asian bloc that would include both Communist China and the Ho Chi Minh government in Indo-China. Mao Tse-Tung played along with Nehru, not because he planned to be another Tito, but to give himself more freedom of action in Southeast Asia.

At the beginning of September, New Delhi and Peiping reached a gentlemen's agreement for the peaceful settlement of the Tibetan question. It was agreed that Peiping should have sovereignty over Tibet and some control over the Tibetan administration. But India was to work with China in improving the Tibetan economy. No Chinese troops were to enter Tibet.

Apparently this understanding between Mao and Nehru was one of the things that stirred Stalin into fast action again. In the West he could see the breakup of his Fifth Column, in Asia the danger of a group that would not be controlled by just Moscow.

• Threat—So Stalin went to work in China with some of his staunch allies in the Mao government and the Russian agents that controlled Manchuria and the interior province of Sinkiang. In effect, Mao was faced with a choice of losing his power or moving into Tibet and Korea. He chose to move.



BOU-AZZER mine in southern Morocco is producing cobalt for U.S. stockpile.

Moroccan Mine Digs Cobalt For U.S.

Cobalt has a way of occurring in inconvenient places. The latest source of the U.S. has tapped is the lonely Bou-Azzer mine (picture, above) in southern Morocco. ECA has a contract with the French government for delivery of 7,200 tons of cobalt concentrate by late 1952, most of it for the U.S. strategic stockpile. The cobalt deal is the latest in a lengthening list of ECA operations to boost French Africa's output of strategic materials (BW-Aug 5 '50, p92).

The U.S. uses nearly half of the world's meager production of cobalt.

It's a key ingredient in high-heat-resistant alloys for jet engine parts and electronic equipment.

Development of the Bou-Azzer mine hasn't been easy for the French. Biggest hurdle is the 300 mi. of rugged country that separates Bou-Azzer from Casablanca. The ore has to be trucked across the Atlas mountains, over passes 11,000-ft. high, along a narrow road said to have more curves per mile than any other in the world. And the Bou-Azzer country is bone dry. Its walled mud towns often wash away when it rains—about once every 15 years.

Sterling Poser

Brazil, which has just jumped out of the frying pan of a dollar shortage, finds itself sizzling over a lack of sterling.

RIO DE JANEIRO—Just as Brazilians are congratulating themselves on licking a serious dollar shortage, a new ogre appears to gum up their country's foreign trade. This time it's sterling shortage.

The situation is so tight that many British exporters have clamped down on shipments to Brazil until importers there settle up an estimated \$60-million in commercial debts. That's a lot smaller than the \$120-million Brazil owed U.S. traders last year; but in relation to total Brazil-British trade, it's even bigger. And it may prove more complicated.

• **Coffee Ante**—Brazilians are racking their brains for an answer. One solution that's making the rounds in Rio involves coffee, far and away Brazil's chief export. The plan: Brazil would ship large amounts of coffee to Britain, allowing the British to set up shop as coffee re-exporters to Europe.

Such a move might make dollars the problem again and hit U.S. salesmen in Brazil hard. Coffee exports to the U.S. would be cut down; and U.S.-Brazilian trade, which rests solidly on Brazil's ability to pile up dollars with its heavy U.S. coffee sales, would suffer (BW-Jul. 8'50, p100).

• **Sterling-Dollar Crisis**—The sterling crisis started brewing in 1949. While Brazil was cutting U.S. purchases to the bone, piling up a dollar surplus of \$100-million on a total two-way trade of \$940-million, Brazilian importers went merrily along buying British. As a result, 1949 total trade with Britain of \$220-million turned up a deficit of \$47.5-million. And things haven't improved much during 1950.

Brazilians had hopes that a recently signed barter deal with Britain would turn the tide. The agreement calls for a year's exchange of goods worth \$269-million, provides Brazil with a neat surplus of \$19-million. But it looks now as if a large part of the agricultural produce Brazil is supposed to send Britain has already been shipped—under previous barter arrangements.

The British would be tickled pink if they could get the Brazilian coffee. One of their fondest hopes is to have a London coffee market, supplying Europe and other parts of the world as well. So far, however, Brazil has refused to cooperate.

• **Competition**—But many Brazilians are sympathetic. Coffee growers and

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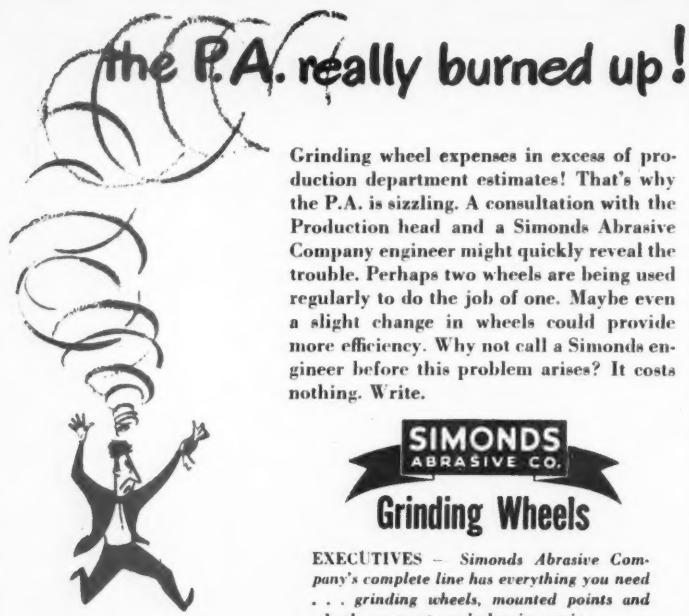


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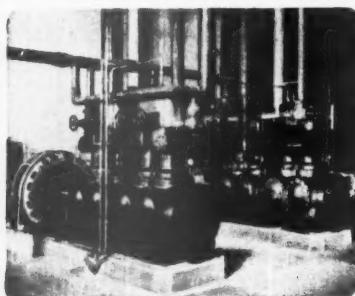


Refrigeration

The three buildings of the Philadelphia Warehousing and C. S. Co. occupy a city block along the Delaware River water-front. Until recently the cold storages were cooled with steam-driven refrigerating machines installed in 1890 and 1911.

Today the cooling load is carried by four new Frick compressors, driven by electric motors totaling 775 hp. A battery of large shell-and-tube brine coolers was included in the modernization program.

Let us submit estimates on the up-to-date cooling equipment you may need; write, wire, phone or visit



Two of the Four Frick Ammonia Compressors at the Philadelphia Warehousing and C. S. Co.

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brokers think that turning the British down on coffee will only bring trouble: British African colonies will push coffee culture and emerge as a stiff competitor for the world market.

• **Alternatives**—Meantime, other solutions to the sterling problem besides re-jigging coffee exports are being discussed. Here's how they shape up:

- Pare down British imports drastically. Brazilians aren't too happy about this approach, figuring it will give their inflation another boost by creating a further shortage of consumer goods.

- Use some of Brazil's growing dollar balance to cover purchases in Britain, or import more from the U. S. and less from Britain. But Brazil wants to hoard its dollars in order to buy U. S. goods as a "war insurance" stockpile.

- Devalue the cruzeiro, now worth about 5¢. Then the British might buy more from Brazil. This move is getting more and more attention in Rio.

Incoming President Vargas hasn't yet given a hint as to how he'll face the trade situation. Some observers figure he'll imitate Franco Spain and Argentina: set up a multiple exchange rate, maintaining the price of coffee at the prevailing dollar equivalent while devaluing the cruzeiro for other transactions. That way Brazil could keep its dollar earnings intact with coffee sales, lower the price of other farm products for Britain and the rest of the world.

BUSINESS ABROAD BRIEFS

High shipbuilding costs tempt U.S. companies to shop abroad. Yards in Britain and on the continent are building 41 vessels for American account; U.S. yards have only 29 ships abuilding.

Plough, Inc., a Memphis pharmaceutical house, is planning a manufacturing unit in Israel. Plough will supply raw materials and machinery from the U. S.

Britain's October exports broke three all-time records: (1) Overall exports—\$566-million; (2) to North America—\$70.3-million; (3) to the U. S.—\$36.6-million.

Iran decided on discretion, dropped Radio Teheran's rebroadcasts of the Voice of America because it was "too anti-Russian." Iranians just signed a \$20-million trade deal with the Soviets.

German cement—20,000 bags of it—arrived last week in Norfolk, Va. (BW—Oct. 7'50, p33).

The Bahamas can be self-supporting in food and thereby cut their dollar spending, Britain believes. Initial project will cost £1-million.

Britain Speeds Up Production of Synthetics

Two weeks ago, Harold Wilson, president of the British Board of Trade, called for all-out development of synthetic fibers in Britain's textile industry. His idea was to cut down on imported raw materials.

Wilson's prayers were answered almost overnight. Imperial Chemical Industries, Ltd., Britain's big chemical combine, decided to go ahead with commercial production of terylene, one of the most promising synthetics. It's called Fiber V in the U.S., where du Pont is working on it (BW-Nov. 18 '50, p.75). ICI plans a factory costing "several million pounds" to turn out 11-million lb. of the fiber annually by 1954-1955.

• U.S. Lags—ICI's move may put Britain a jump ahead of the U.S. in the development of Fiber V. Though the fiber was invented in England, du Pont acquired the U.S. rights back in 1946 and has been experimenting with it ever since. So far, du Pont hasn't come up with a decision to produce Fiber V commercially.

But du Pont has test-marketed some Fiber V shirts and blouses; and du Pont men are wearing suits made of the stuff.



Embattled Billboards

The feud between East and West Berliners has now cropped up in a billboard battle. In the foreground—on the West's side of Potsdamer Platz—is the huge electric bulletin board that flashes uncensored news to the East. Not to be outdone, the guardians of Communist culture are erecting a competing electric board on their side of the fence. Object: to block off as much of the Western sign as possible.

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Americans Want First Things First

Election post mortems are pretty well in. The setback to the Administration has been variously put down to: foreign policy, labor's campaign tactics, the high cost of living, high taxes, McCarthyism, local issues, and the normal off-year reaction against the party in power.

All these factors are certainly part of the story. But in our judgment, they reflected something deeper—a basic undercurrent of sentiment that surged widely through the country.

To identify it one must recall a dramatic event the Saturday night before election. Harry Truman, the leader of the Democratic party, went on a complete nationwide radio and television network to make the climactic appeal for a Fair Deal victory.

His speech followed the successful 1948 formula. One by one he talked to the economic groups in this country, telling each in brutally frank language what his Administration had done for them. As he concluded his plea for a Fair Deal triumph, the President leaned intently toward the television camera and invited the millions of Americans watching in their homes to "vote for yourselves."

Three days later, Harry Truman's prediction of a Democratic landslide came a cropper. Why?

A major factor was that the whole Fair Deal appeal became obsolete to millions of citizens amid the clattering events of June 25 in Korea. And the Fair Deal politicians didn't realize it.

Americans listening to Harry Truman's appeal to vote for their pocketbooks felt that it sounded terribly out of joint with the times. The lightning of war was flashing on the distant horizon. Communism had broken in upon the free world in open armed aggression. Peace was at the mercy of an incident.

People were uneasy. Immense forces were in motion. The specter of atomic war haunted American homes. To many people, the appeal of the Fair Deal to their economic interests went down like a rootless tree. Farmers, workers, and others were concerned about such elemental things as the safety of their families and their country. They found the old political handout philosophy pretty thin fare for the ordeal they saw ahead. They wanted a government they could depend on. About the Fair Dealers, they felt, as did an Iowa farmer who said, "They're not up to what they're into."

This changed outlook on the part of millions of voters was registered at the polls. It showed through in many of the national and local issues that decided the outcome.

The Great Question

Now the great question is how the two parties will interpret what the people have said at the polls.

On the Democratic side it would be disastrous if the President failed to understand the new temper of the

people. If the Fair Dealers have learned nothing from their debacle, this country is in for serious trouble.

On the Republican side it is equally vital that this swing in popular sentiment be rightly gauged. It certainly offers no basis for a return to isolationism. Americans who voted against Truman's foreign policy did not do so because they believe America is "an island—entire unto itself." Their ballots spoke out against it because it didn't go far enough—early enough—in Asia, and because they lacked confidence in the judgment of the managers of that foreign policy.

Victorious Republicans will realize that the people have given a right-of-way to military and foreign-aid programs, that they have called a halt to vast new non-defense schemes, like the Brannan Plan and socialized medicine. But the winners will understand that the people regard the steps the nation has taken in such fields as social security, agricultural policy, and labor-relations legislation as permanent changes in our system. The job here is to put these things on a sounder basis, in order that they may last.

Some problems were settled by the great referendum last Nov. 7. New ones were raised. But the overriding fact for politicians to keep in mind is the new temper of the people. Americans want first things to be put first in this atomic age. They demand of their public servants leadership equal to the times.

Right to Left

When British elections last February showed the country split almost evenly between Labor and Conservative, many people thought that government there would be paralyzed until the stalemate was resolved by another try at the polls. Labor held power by an eyelash.

Yet, in these nine months, little eagerness for a new test of strength has been apparent in either party. On the surface, at least, Labor is content to let things ride as they are. And the Conservatives, since they lost last summer a rather half-hearted test on steel, have not tried to upset the delicately balanced apple cart.

Meanwhile, under the surface all is not so quiet. The recent reassembling of Parliament shows Prime Minister Attlee held captive by the militant radical minority within his own party. Aneurin Bevan, Minister of Health who has charge of Labor's housing program, is its most forceful spokesman. The Conservatives seem to be moving into a position that brings them closer to the conservative Socialists. So far from power and yet so close to it, they show signs of abandoning their ancient dignity as the party of "sound government and sound men" for a more modern position. They are now beginning to argue that they can do all Labor has done and do it better.

In Britain, at least, the slow trend to the left still continues.

Great Ideas of Western Man . . . ONE OF A SERIES



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Joseph Addison
on Education

Education is a companion which no misfortune can depress,
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Safety Idea

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Versatile Geon opens up another sales field

IT seems there's no end to the sales-building ideas that Geon materials stir up. Take these new flame-resistant clothes, for example. They're made of a fabric that's treated with a Geon latex compound. They help to protect workmen against fire.

Most important, these clothes can't continue to burn once any directly applied flame is removed. Gases formed by the flame-proofing compound completely extinguish any blaze. Dangerous afterglow is eliminated.

That's just the start of the compound's advantages. The fabric stays flame-resistant even after repeated

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They may stir up ideas for you. We'll gladly help you with technical advice to start them on their way as sales-makers for you. Geon materials

come in many forms—including resin, latex and compounded plastics. We supply them as raw materials only—no finished products. For information, please write Department A-12, B. F. Goodrich Chemical Company, Rose Building, Cleveland 15, Ohio. In Canada: Kitchener, Ontario. Cable address: Goodchemco.



GEON RESINS • GOOD-RITE PLASTICIZERS . . . the ideal team to make products easier, better and more saleable.

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